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LOGINID:SSPTACMG1639

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\* \* \* \* \* Welcome to STN International \* \* \* \* \*

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	APR 02	CAS Registry Number Crossover Limits Increased to 500,000 in Key STN Databases
NEWS	3	APR 02	PATDPAFULL: Application and priority number formats enhanced
NEWS	4	APR 02	DWPI: New display format ALLSTR available
NEWS	5	APR 02	New Thesaurus Added to Derwent Databases for Smooth Sailing through U.S. Patent Codes
NEWS	6	APR 02	EMBASE Adds Unique Records from MEDLINE, Expanding Coverage back to 1948
NEWS	7	APR 07	50,000 World Traditional Medicine (WTM) Patents Now Available in Caplus
NEWS	8	APR 07	MEDLINE Coverage Is Extended Back to 1947
NEWS	9	JUN 16	WPI First View (File WPIFV) will no longer be available after July 30, 2010
NEWS	10	JUN 18	DWPI: New coverage - French Granted Patents
NEWS	11	JUN 18	CAS and FIZ Karlsruhe announce plans for a new STN platform
NEWS	12	JUN 18	IPC codes have been added to the INSPEC backfile (1969-2009)
NEWS	13	JUN 21	Removal of Pre-IPC 8 data fields streamline displays in CA/Caplus, CASREACT, and MARPAT
NEWS	14	JUN 21	Access an additional 1.8 million records exclusively enhanced with 1.9 million CAS Registry Numbers -- EMBASE Classic on STN
NEWS	15	JUN 28	Introducing "CAS Chemistry Research Report": 40 Years of Biofuel Research Reveal China Now Atop U.S. in Patenting and Commercialization of Bioethanol
NEWS	16	JUN 29	Enhanced Batch Search Options in DGENE, USGENE, and PCTGEN
NEWS	17	JUL 19	Enhancement of citation information in INPADOC databases provides new, more efficient competitor analyses
NEWS	18	JUL 26	CAS coverage of global patent authorities has expanded to 61 with the addition of Costa Rica
NEWS	19	SEP 15	MEDLINE Cited References provide additional relevant records with no additional searching.
NEWS	20	OCT 04	Removal of Pre-IPC 8 data fields streamlines displays in USPATFULL, USPAT2, and USPATOLD.
NEWS	21	OCT 04	Precision of EMBASE searching enhanced with new chemical name field

NEWS EXPRESS FEBRUARY 15 10 CURRENT WINDOWS VERSION IS V8.4.2,  
AND CURRENT DISCOVER FILE IS DATED 07 JULY 2010.

NEWS HOURS STN Operating Hours Plus Help Desk Availability

NEWS LOGIN      Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

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\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 15:51:56 ON 04 OCT 2010

=> fil reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.22	0.22

FILE 'REGISTRY' ENTERED AT 15:52:09 ON 04 OCT 2010

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES:    3 OCT 2010    HIGHEST RN 1244955-26-7

DICTIONARY FILE UPDATES:   3 OCT 2010    HIGHEST RN 1244955-26-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 26, 2010.

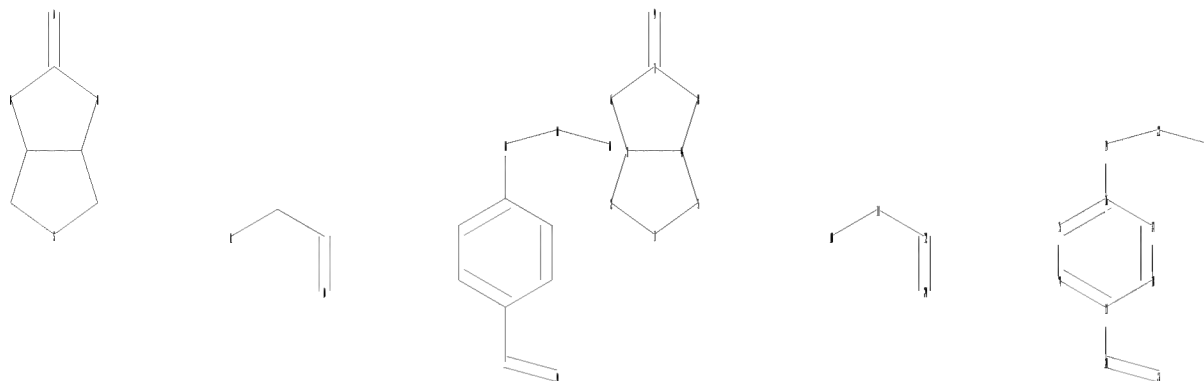
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=>

Uploading C:\Program Files\STNEXP\Queries\biotin aa phenylazide.str



```

chain nodes :
9 10 11 12 19 20 21 22 23 24
ring nodes :
1 2 3 4 5 6 7 8 13 14 15 16 17 18
chain bonds :
7-9 10-11 11-12 12-24 13-20 16-19 19-22 20-21 22-23
ring bonds :
1-2 1-5 2-3 3-4 3-6 4-5 4-8 6-7 7-8 13-14 13-18 14-15 15-16 16-17
17-18
exact/norm bonds :
1-2 1-5 2-3 3-4 3-6 4-5 4-8 6-7 7-8 7-9 10-11 12-24 16-19 19-22 20-21
22-23
exact bonds :
11-12 13-20
normalized bonds :
13-14 13-18 14-15 15-16 16-17 17-18

```

```

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:CLASS 10:CLASS
11:CLASS 12:CLASS 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS
20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS

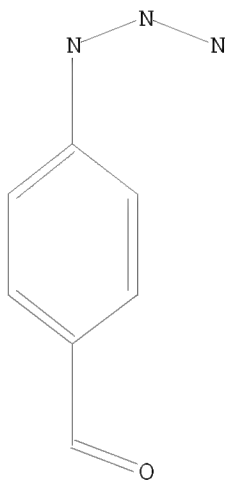
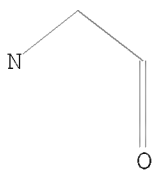
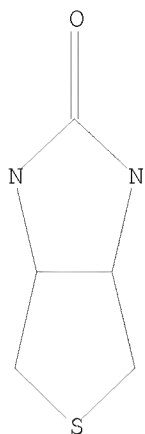
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L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1 full

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FULL SCREEN SEARCH COMPLETED - 248 TO ITERATE

100.0% PROCESSED 248 ITERATIONS

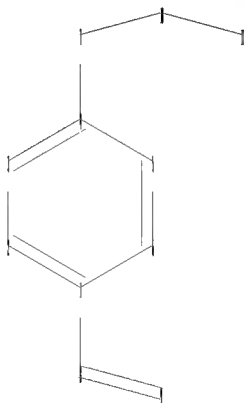
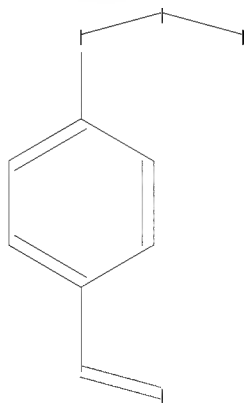
0 ANSWERS

SEARCH TIME: 00.00.01

L2 0 SEA SSS FUL L1

=>

Uploading C:\Program Files\STNEXP\Queries\phenyl azide.str



chain nodes :

7 8 9 10 11

ring nodes :

1 2 3 4 5 6

```

chain bonds :
1-8  4-7  7-10  8-9  10-11
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6
exact/norm bonds :
4-7  7-10  8-9  10-11
exact bonds :
1-8
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6

```

```

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  8:CLASS  9:CLASS  10:CLASS
11:CLASS

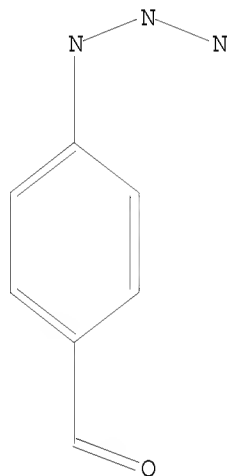
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L3            STRUCTURE UPLOADED

```

=> d 13
L3 HAS NO ANSWERS
L3            STR

```



Structure attributes must be viewed using STN Express query preparation.

```

=> s 13 full
FULL SEARCH INITIATED 15:53:30 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -      30830 TO ITERATE

```

```

100.0% PROCESSED      30830 ITERATIONS                      248 ANSWERS
SEARCH TIME: 00.00.01

```

L4            248 SEA SSS FUL L3

```

=> d scan

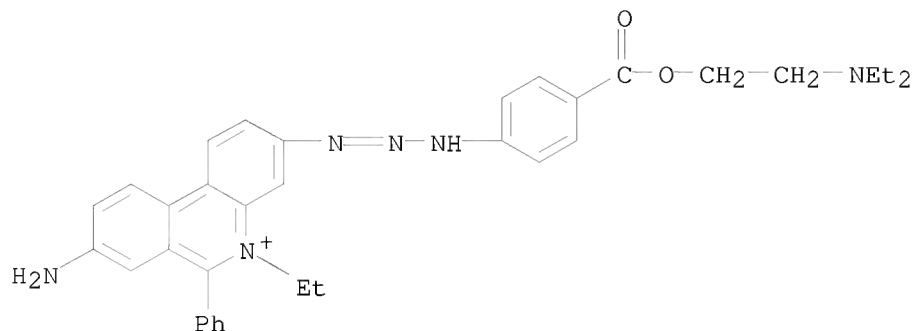
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```

L4    248 ANSWERS    REGISTRY    COPYRIGHT 2010 ACS on STN
IN    Phenanthridinium, 8-amino-3-[3-[4-[[2-
      (diethylamino)ethoxy]carbonyl]phenyl]-2-triazen-1-yl]-5-ethyl-6-phenyl-

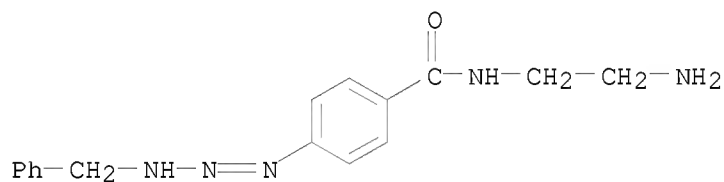
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MF C34 H37 N6 O2  
 CI COM



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

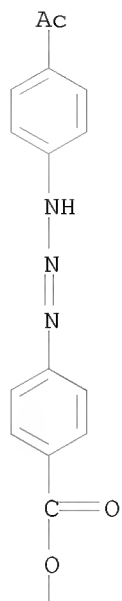
L4 248 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
 IN Benzamide, N-(2-aminoethyl)-4-[3-(phenylmethyl)-2-triazen-1-yl]-  
 MF C16 H19 N5 O



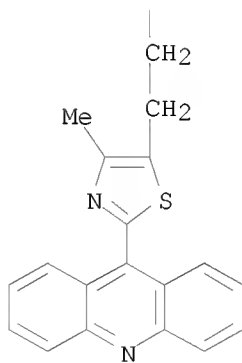
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L4 248 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
 IN Benzoic acid, 4-[3-(4-acetylphenyl)-2-triazen-1-yl]-,  
 2-[2-(9-acridinyl)-4-methyl-5-thiazolyl]ethyl ester  
 MF C34 H27 N5 O3 S

PAGE 1-A



PAGE 2-A

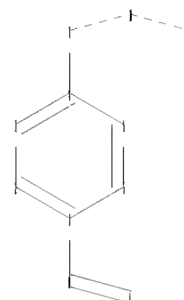
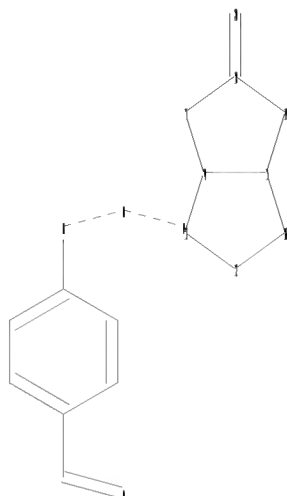
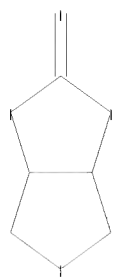


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=>

Uploading C:\Program Files\STNEXP\Queries\biotin phenylazide.str



```

chain nodes :
7 8 9 10 11 20
ring nodes :
1 2 3 4 5 6 12 13 14 15 16 17 18 19
chain bonds :
1-8 4-7 7-10 8-9 10-11 18-20
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 12-13 12-16 13-14 14-15 14-17 15-16 15-19
17-18 18-19
exact/norm bonds :
4-7 7-10 8-9 10-11 12-13 12-16 13-14 14-15 14-17 15-16 15-19 17-18
18-19 18-20
exact bonds :
1-8
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

```

```

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:CLASS 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:CLASS

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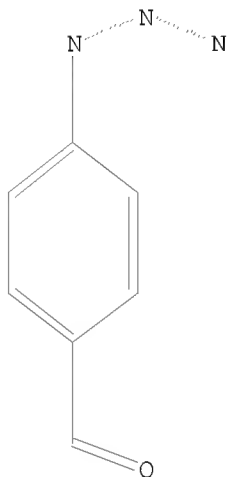
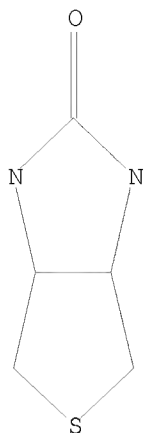
L5 STRUCTURE UPLOADED

=> d 15

L5 HAS NO ANSWERS

L5 STR





Structure attributes must be viewed using STN Express query preparation.

=> s 15 full

FULL SEARCH INITIATED 15:55:18 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 248 TO ITERATE

100.0% PROCESSED 248 ITERATIONS

99 ANSWERS

SEARCH TIME: 00.00.01

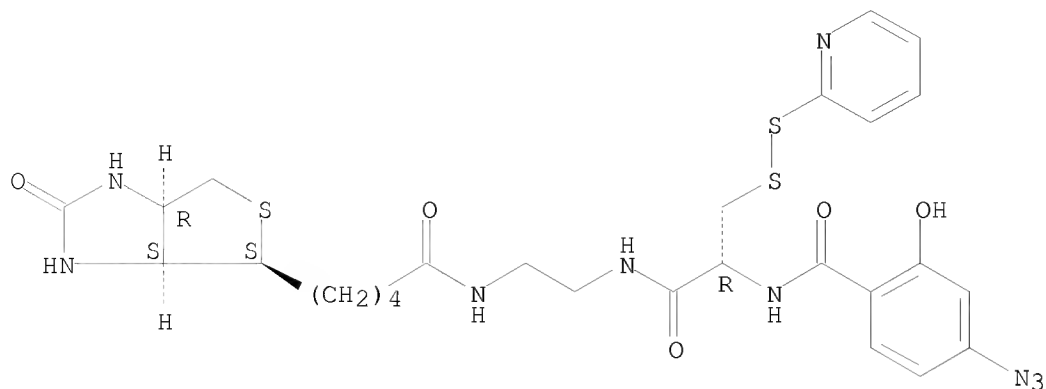
L6 99 SEA SSS FUL L5

=> d scan

L6 99 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN

IN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[2-[[[(2R)-2-[(4-azido-2-hydroxybenzoyl)amino]-1-oxo-3-(2-  
pyridinyldithio)propyl]amino]ethyl]hexahydro-2-oxo-, (3aS,4S,6aR)-  
MF C27 H33 N9 O5 S3

Absolute stereochemistry.



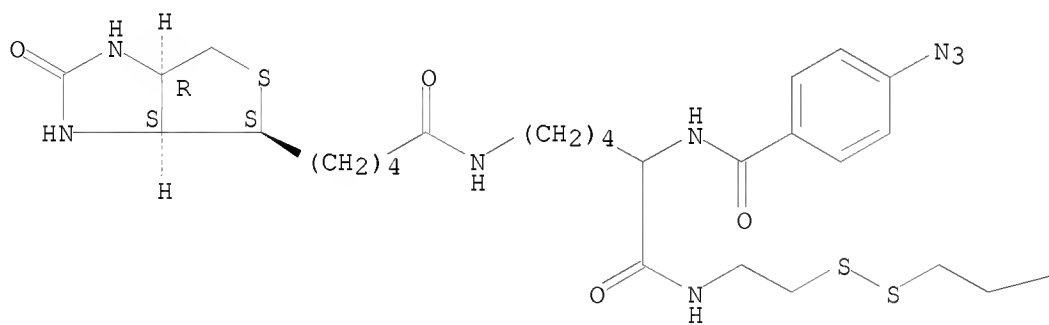
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

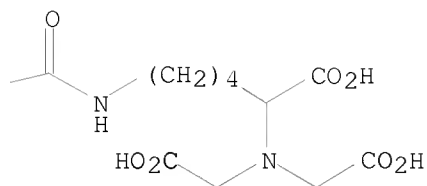
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L6 99 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
 IN 13,14-Dithia-3,9,17,24-tetraazanonacosanoic acid,  
 19-[(4-azidobenzoyl)amino]-4-carboxy-3-(carboxymethyl)-29-[(3aS,4S,6aR)-  
 hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-10,18,25-trioxo-  
 MF C38 H56 N10 O11 S3

Absolute stereochemistry.

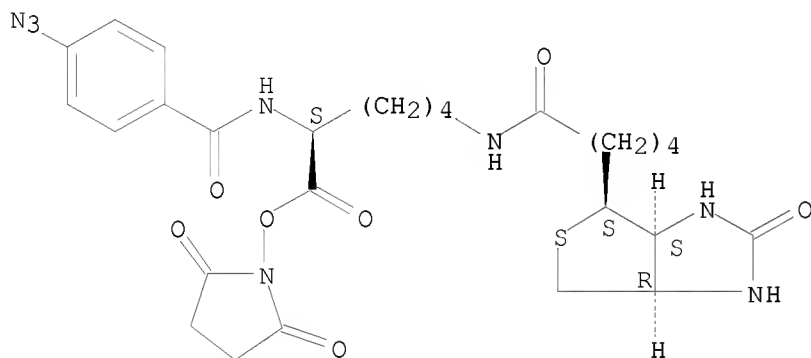
PAGE 1-A





L6 99 ANSWERS REGISTRY COPYRIGHT 2010 ACS on STN  
 IN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[5-[(4-azidobenzoyl)amino]-6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-  
 oxohexyl]hexahydro-2-oxo-, [3aS-[3aα,4β(R\*),6aα]]- (9CI)  
 MF C27 H34 N8 O7 S

Absolute stereochemistry.



HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> d his

(FILE 'HOME' ENTERED AT 15:51:56 ON 04 OCT 2010)

FILE 'REGISTRY' ENTERED AT 15:52:09 ON 04 OCT 2010

L1 STRUCTURE UPLOADED  
 L2 0 S L1 FULL  
 L3 STRUCTURE UPLOADED  
 L4 248 S L3 FULL  
 L5 STRUCTURE UPLOADED  
 L6 99 S L5 FULL

=> fil caplus  
 COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION

FULL ESTIMATED COST

576.58

576.80

FILE 'CAPLUS' ENTERED AT 15:56:08 ON 04 OCT 2010  
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FILE COVERS 1907 - 4 Oct 2010 VOL 153 ISS 15  
FILE LAST UPDATED: 3 Oct 2010 (20101003/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2010  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2010

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2010.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 16

L7 60 L6

=> s 17 and py<=2004

25159329 PY<=2004

L8 33 L7 AND PY<=2004

=> d ti hitstr 23-33

L8 ANSWER 23 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

TI Photoaffinity labeling of the T cell receptor on living cytotoxic T lymphocytes

IT 147557-16-2 149235-89-2

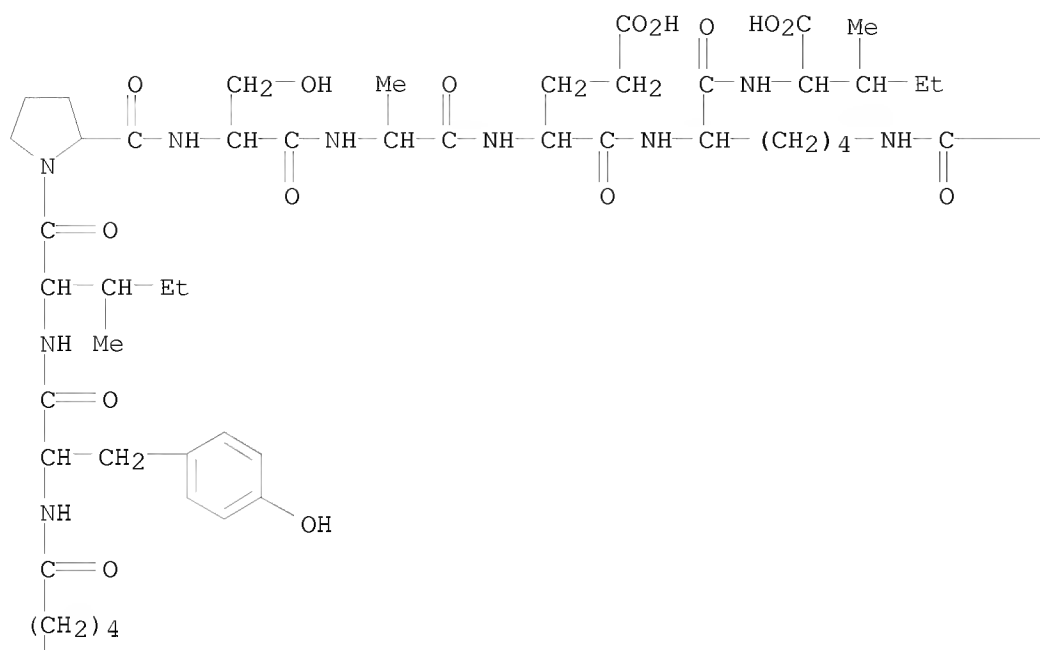
RL: BIOL (Biological study)

(in photoaffinity labeling of T-cell receptor on cytotoxic T-lymphocytes)

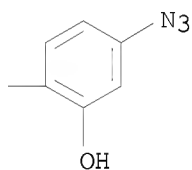
RN 147557-16-2 CAPLUS

CN L-Isoleucine, N-[N6-(4-azido-2-hydroxyiodobenzoyl)-N2-[N-[N-[N-[1-[N-[N-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-seryl]-L-alanyl]-L- $\alpha$ -glutamyl]-L-lysyl]-, [3aS-(3a $\alpha$ ,4 $\beta$ ,6a $\alpha$ )]- (9CI) (CA INDEX NAME)

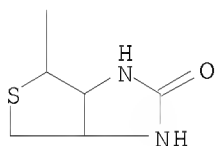
PAGE 1-A



PAGE 1-B



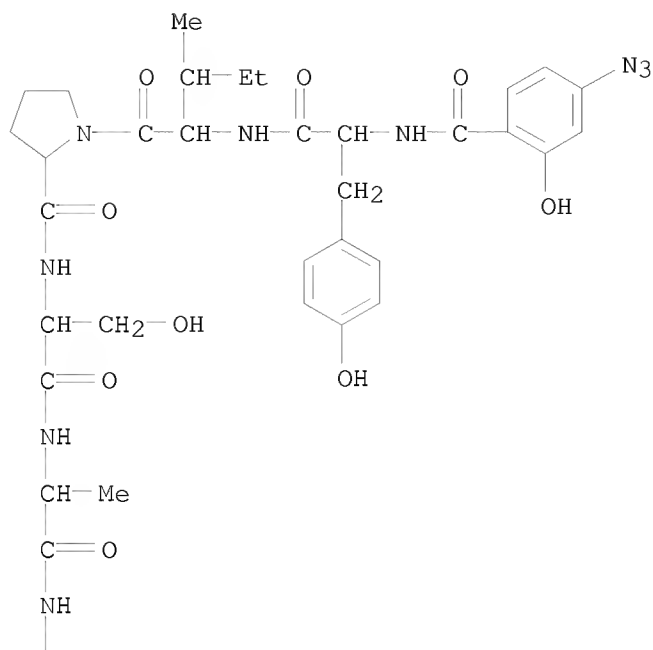
PAGE 2-A



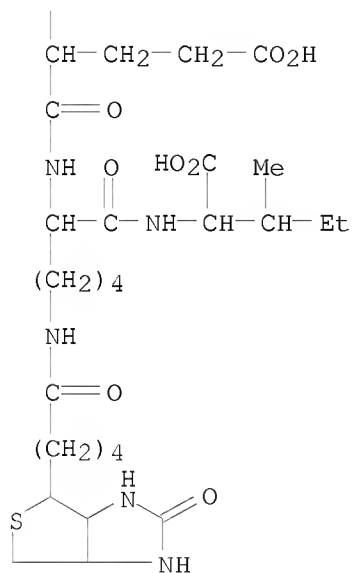
D1- I

RN 149235-89-2 CAPLUS  
 CN L-Isoleucine, N-[N2-[N-[N-[N-[1-[N-[N-(4-azido-2-hydroxyiodobenzoyl)-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-seryl]-L-alanyl]-L- $\alpha$ -glutamyl]-N6-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-L-lysyl]-, [3aS-(3 $\alpha\alpha$ , 4 $\beta$ , 6 $\alpha\alpha$ )]- (9CI) (CA INDEX NAME)

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PAGE 2-A



PAGE 3-A

D1- I

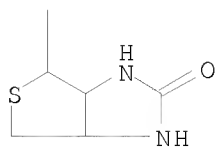
L8 ANSWER 24 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
 TI Differential T cell receptor photoaffinity labeling among H-2Kd restricted  
 cytotoxic T lymphocyte clones specific for a photoreactive peptide

IT 147557-16-2 147794-88-5 147794-89-6

(cytotoxic T-lymphocyte to, TCR receptor  $\alpha$ -chain J segment usage by)

CN L-Isoleucine, N-[N6-(4-azido-2-hydroxyiodobenzoyl)-N2-[N-[N-[N-[1-[N-[N-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-seryl]-L-alanyl]-L- $\alpha$ -glutamyl]-L-lysyl]-, [3aS-(3a $\alpha$ ,4 $\beta$ ,6a $\alpha$ )]- (9CI) (CA INDEX NAME)

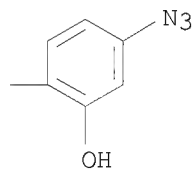
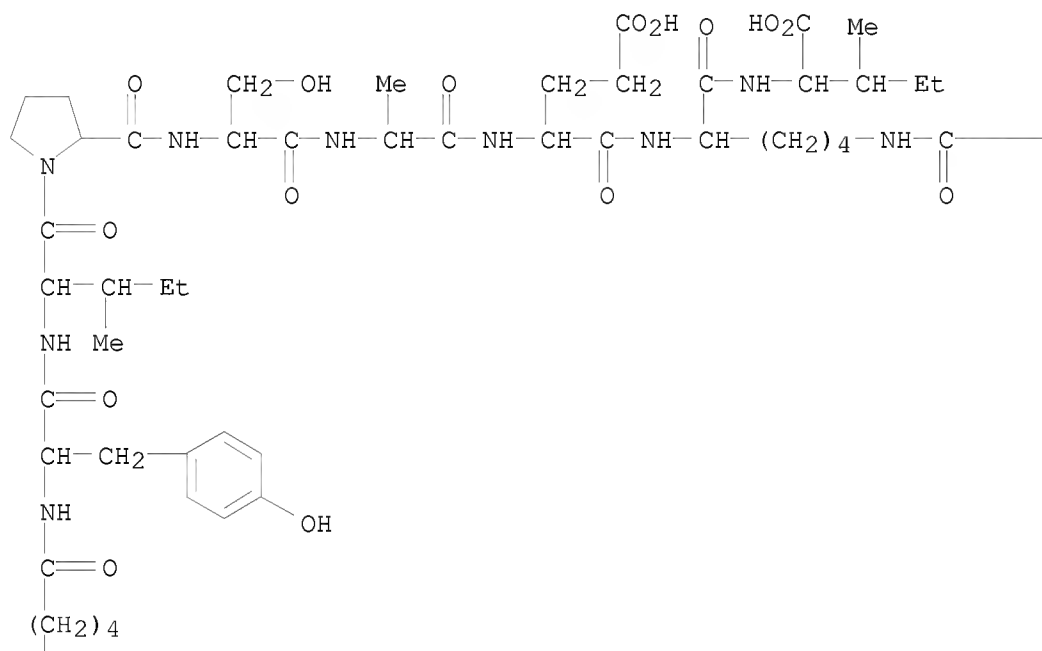
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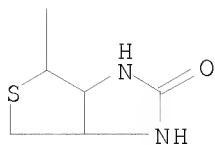
D1- I

RN 147794-88-5 CAPLUS

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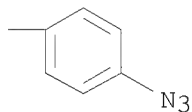
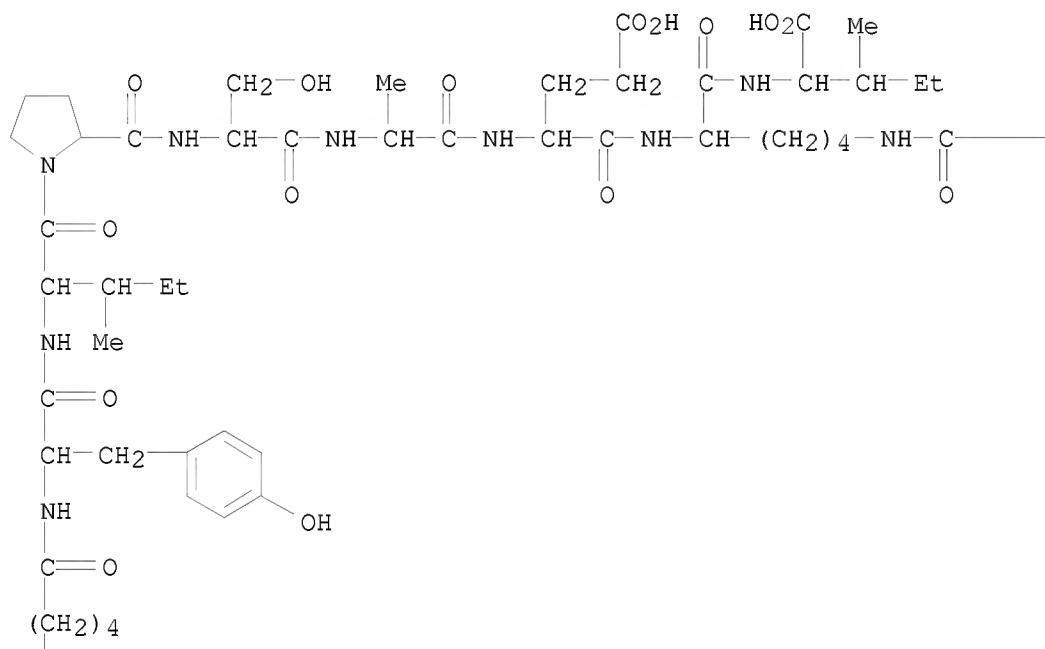


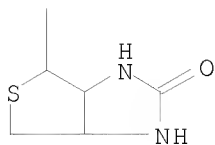




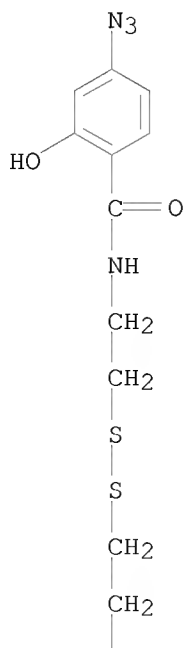
RN 147794-89-6 CAPLUS

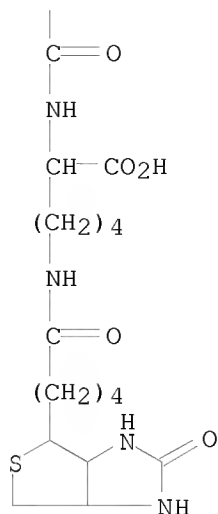
CN L-Isoleucine, N-[N6-(4-azidobenzoyl)-N2-[N-[N-[N-[1-[N-[N-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-seryl]-L-alanyl]-L- $\alpha$ -glutamyl]-L-lysyl]-, [3aS-(3 $\alpha$ , 4 $\beta$ , 6 $\alpha$ )]- (9CI) (CA INDEX NAME)



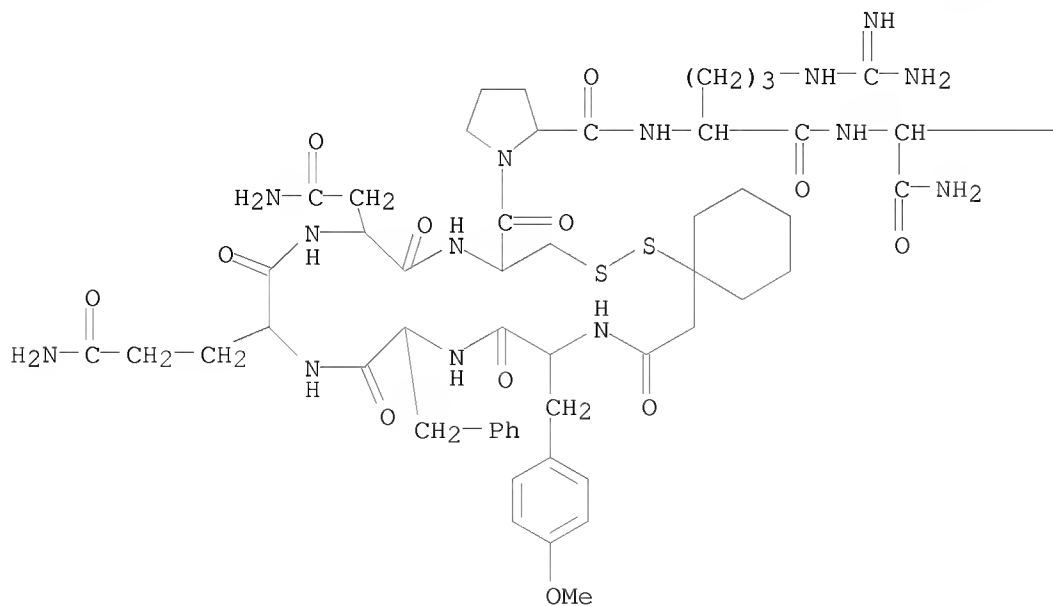


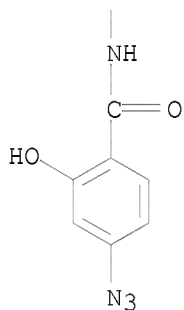
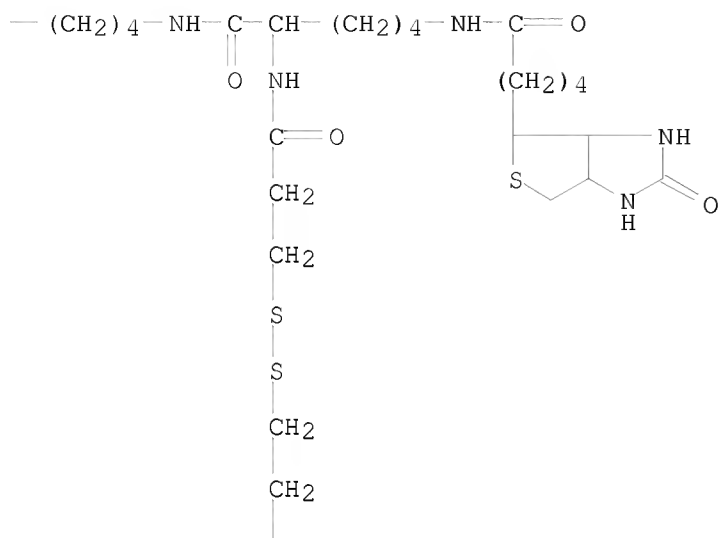
L8 ANSWER 25 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
 TI Design and synthesis of heterofunctional V1a-selective vasopressin  
 receptor ligands with lysine at position 9  
 IT 147023-69-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reaction of, with N-terminal lysine-substituted AVP analog)  
 RN 147023-69-6 CAPLUS  
 CN L-Lysine, N2-[3-[[2-[(4-azido-2-hydroxybenzoyl)amino]ethyl]dithio]-1-  
 oxopropyl]-N6-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-  
 oxopentyl]-, [3aS-(3aα,4β,6aα)]- (9CI) (CA INDEX NAME)





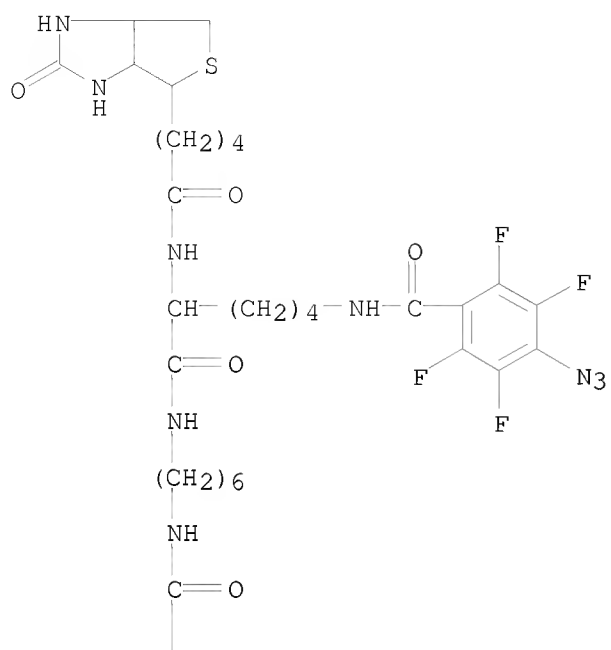
IT 147041-32-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as vasopressinergic V1a receptor ligand)  
 RN 147041-32-5 CAPLUS  
 CN L-Lysinamide, N-[(1-mercaptopcyclohexyl)acetyl]-O-methyl-L-tyrosyl-L-phenylalanyl-L-glutaminyl-L-asparaginyl-L-cysteinyl-L-prolyl-L-arginyl-N6-[N2-[3-[[2-[(4-azido-2-hydroxybenzoyl)amino]ethyl]dithio]-1-oxopropyl]-N6-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-L-lysyl]-, cyclic (1→5)-disulfide (9CI) (CA INDEX NAME)



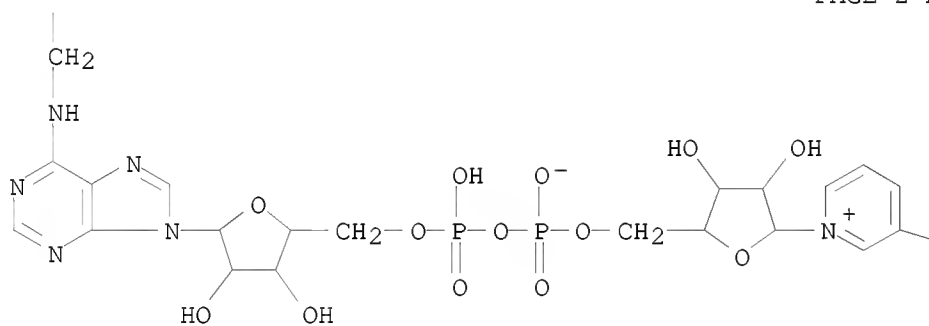


L8 ANSWER 26 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
 TI Attaching analytes in the proximity of the active site of enzymes  
 IT 146690-72-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and glucose phosphate dehydrogenase photolabeling by)  
 RN 146690-72-4 CAPLUS  
 CN Adenosine 5'-(trihydrogen diphosphate),  
 N-[2-[[6-[[6-[(4-azido-2,3,5,6-tetrafluorobenzoyl)amino]-2-[[5-(hexahydro-  
 2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-1-  
 oxohexyl]amino]hexyl]amino]-2-oxoethyl]-, P'→5'-ester with  
 3-(aminocarbonyl)-1-β-D-ribofuranosylpyridinium inner salt,  
 [3aS-(3αα,4β,6α)]-(9CI) (CA INDEX NAME)

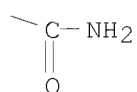
PAGE 1-A



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PAGE 2-B



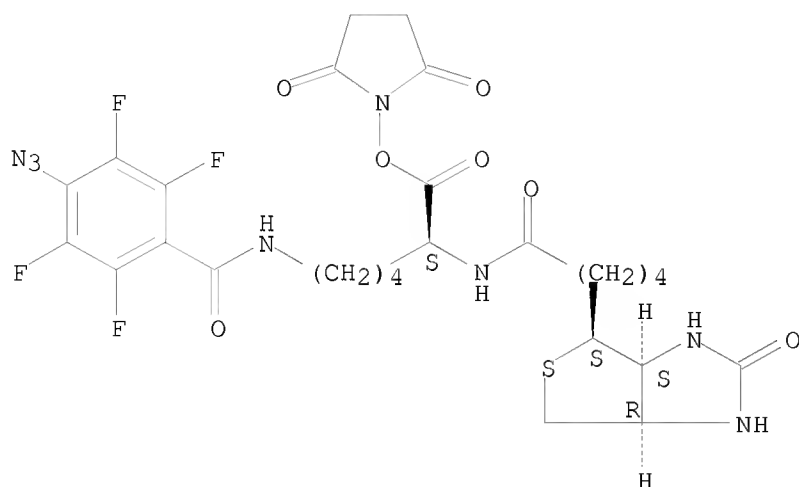
IT 146690-73-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(preparation and reaction with NAD derivative)

RN 146690-73-5 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[5-[(4-azido-2,3,5,6-tetrafluorobenzoyl)amino]-1-[[ (2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]pentyl]hexahydro-2-oxo-,  
[3aS-[3aα,4β(R\*),6aα]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



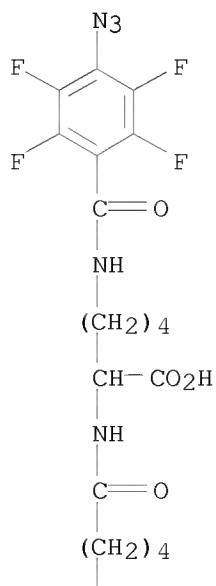
IT 146672-32-4P

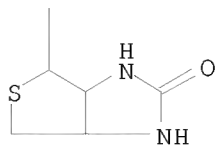
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and succinimidylation of)

RN 146672-32-4 CAPLUS

CN L-Lysine, N6-(4-azido-2,3,5,6-tetrafluorobenzoyl)-N2-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-,  
[3aS-(3aα,4β,6aα)]- (9CI) (CA INDEX NAME)

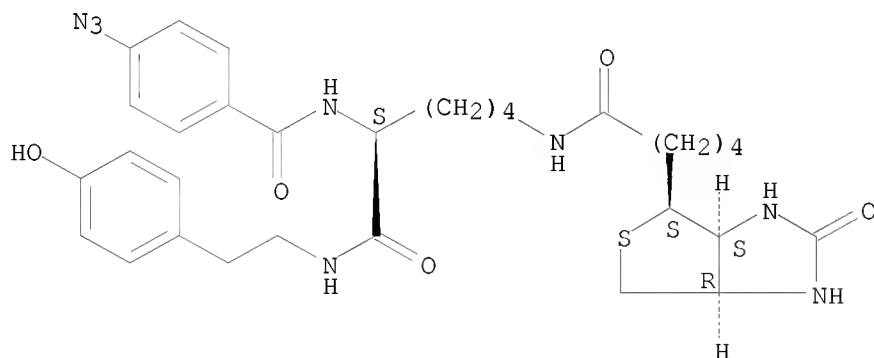
PAGE 1-A



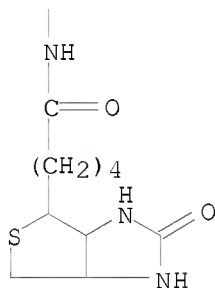
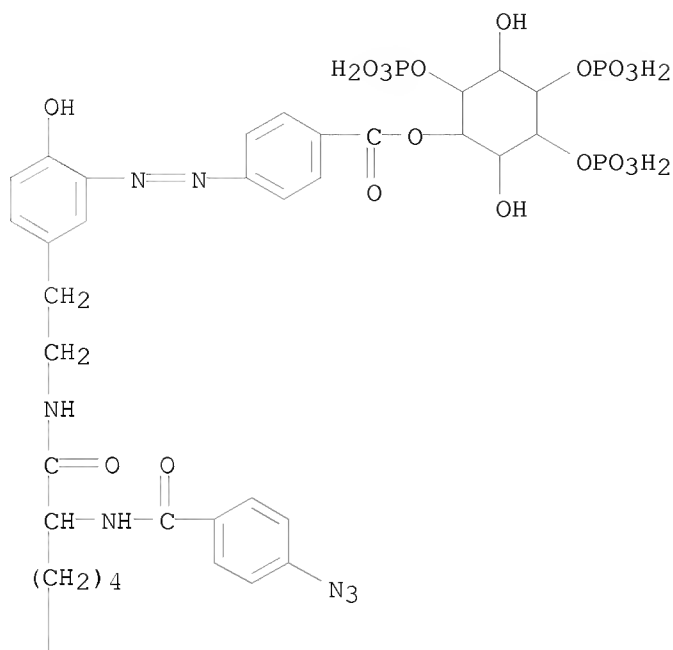


L8 ANSWER 27 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
 TI Synthesis and biological properties of 2-substituted myo-inositol  
 1,4,5-trisphosphate analogs directed toward affinity chromatography and  
 photoaffinity labeling  
 IT 135417-95-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reaction of, with inositol phosphate diazobenzoate)  
 RN 135417-95-7 CAPLUS  
 CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[5-[(4-azidobenzoyl)amino]-6-[[2-(4-hydroxyphenyl)ethyl]amino]-6-  
 oxohexyl]hexahydro-2-oxo-, [3aS-[3a $\alpha$ ,4 $\beta$ (R\*),6a $\alpha$ ]]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

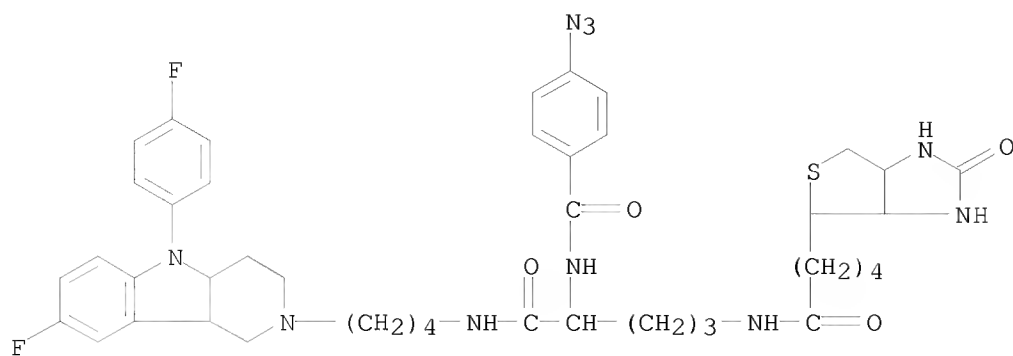


IT 140220-70-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as photoaffinity probe)  
 RN 140220-70-8 CAPLUS  
 CN D-myo-Inositol, 2-[4-[[5-[2-[[2S]-2-[(4-azidobenzoyl)amino]-6-[[5-  
 [(3aS,4S,6aR)-hexahydro-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-  
 1-oxohexyl]amino]ethyl]-2-hydroxyphenyl]azo]benzoate]  
 1,4,5-tris(dihydrogen phosphate) (9CI) (CA INDEX NAME)



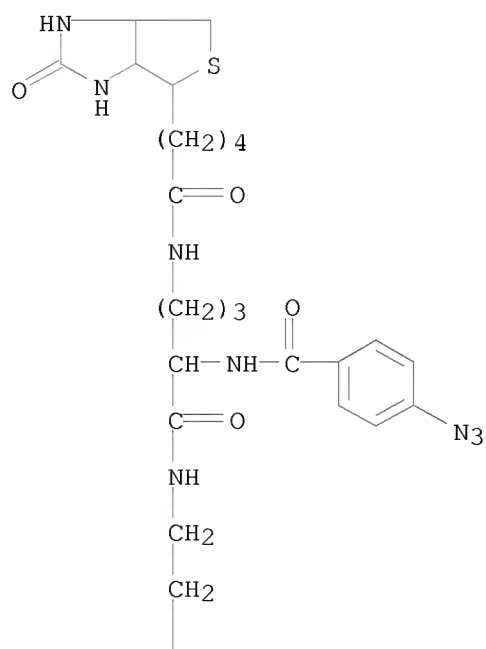
L8 ANSWER 28 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
 TI Synthesis and characterization of biotinylated and photoactivatable  
 neuroleptics. Novel bifunctional probes for dopamine receptors  
 IT 143035-00-1P 143035-04-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation and dopamine receptor affinity of, structure in relation to)  
 RN 143035-00-1 CAPLUS  
 CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[4-[(4-azidobenzoyl)amino]-5-[[4-[8-fluoro-5-(4-fluorophenyl)-  
 1,3,4,4a,5,9b-hexahydro-2H-pyrido[4,3-b]indol-2-yl]butyl]amino]-5-  
 oxopentyl]hexahydro-2-oxo- (CA INDEX NAME)

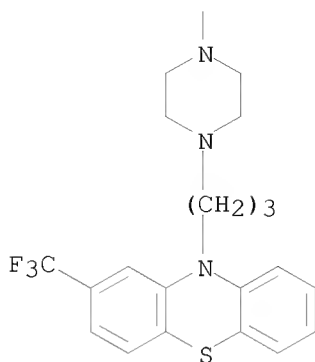




RN 143035-04-5 CAPLUS  
 CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[4-[(4-azidobenzoyl)amino]-5-oxo-5-[[2-[4-[3-[2-(trifluoromethyl)-10H-  
 phenothiazin-10-yl]propyl]-1-piperazinyl]ethyl]amino]pentyl]hexahydro-2-  
 oxo- (CA INDEX NAME)

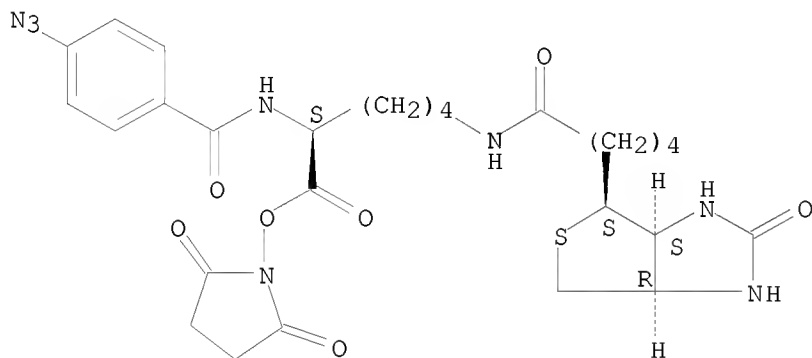
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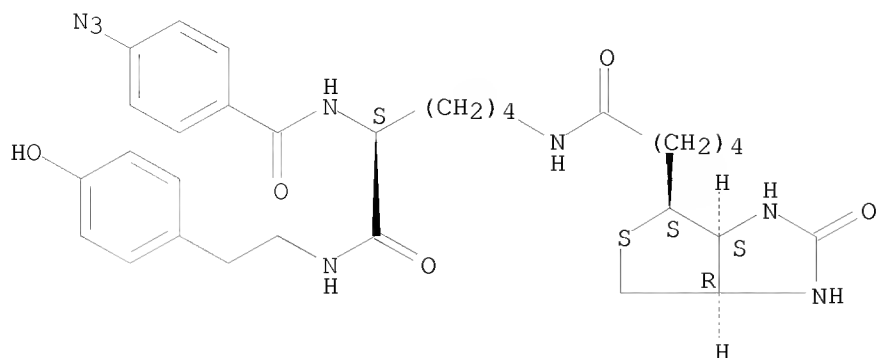
IT 143304-60-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with hexahydrocarboline derivative)  
 RN 143304-60-3 CAPLUS  
 CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[5-[(4-azidobenzoyl)amino]-6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]hexahydro-2-oxo-, [3aS-[3α,4β(R\*),6α]]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.



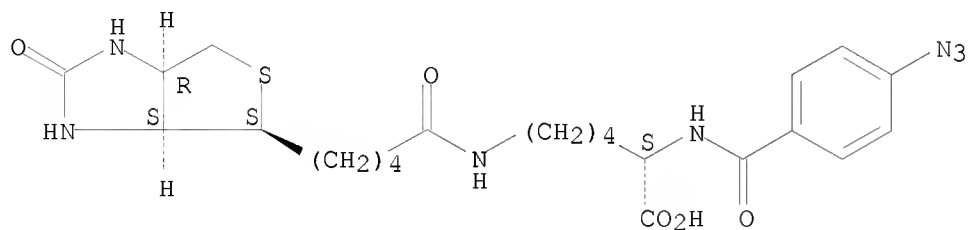
L8 ANSWER 29 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
 TI Preparation of inositol polyphosphate derivatives for control of the  
 calcium ion-participating metabolic steps  
 IT 135417-95-7P 135442-12-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation and reaction of, in preparation of inositol triphosphate-bound  
 biotin-avidin complex probe)  
 RN 135417-95-7 CAPLUS  
 CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[5-[(4-azidobenzoyl)amino]-6-[[2-(4-hydroxyphenyl)ethyl]amino]-6-oxohexyl]hexahydro-2-oxo-, [3aS-[3α,4β(R\*),6α]]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

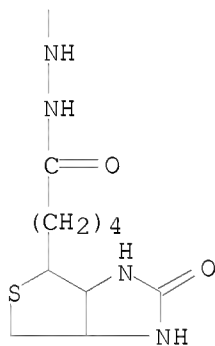
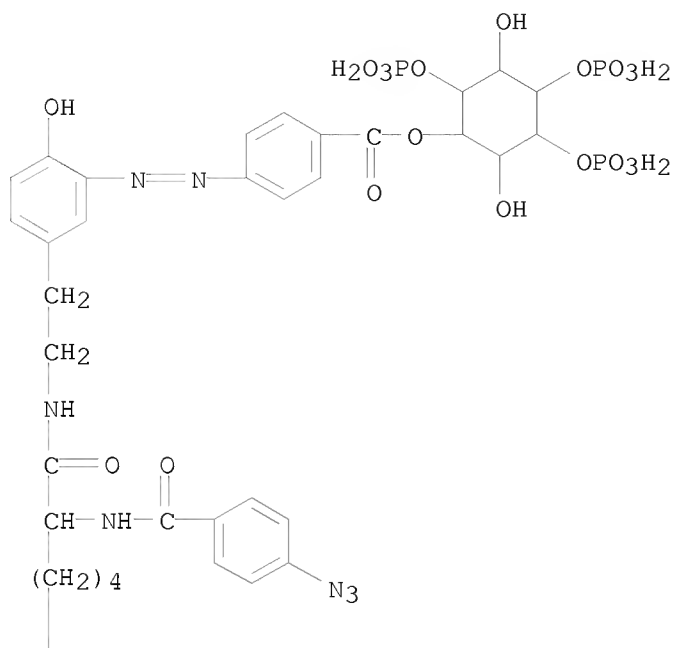


RN 135442-12-5 CAPLUS  
 CN L-Lysine, N2-(4-azidobenzoyl)-N6-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]-imidazol-4-yl)-1-oxopentyl]-, [3aS-(3α,4β,6α)]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

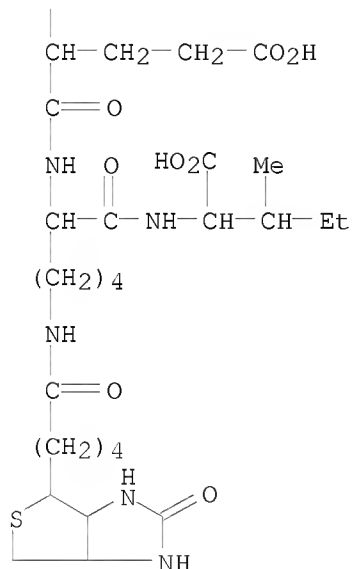
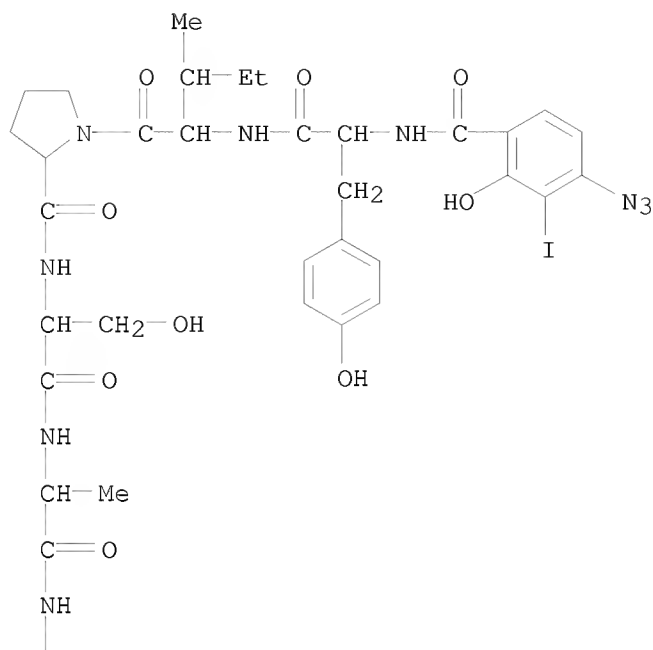


IT 135442-10-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as biotin-avidin complex probe)  
 RN 135442-10-3 CAPLUS  
 CN D-myo-Inositol, 2-[4-[[5-[2-[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]-2-hydroxyphenyl]azo]benzoate]  
 1,4,5-tris(dihydrogen phosphate), monopotassium salt (9CI) (CA INDEX NAME)



● K

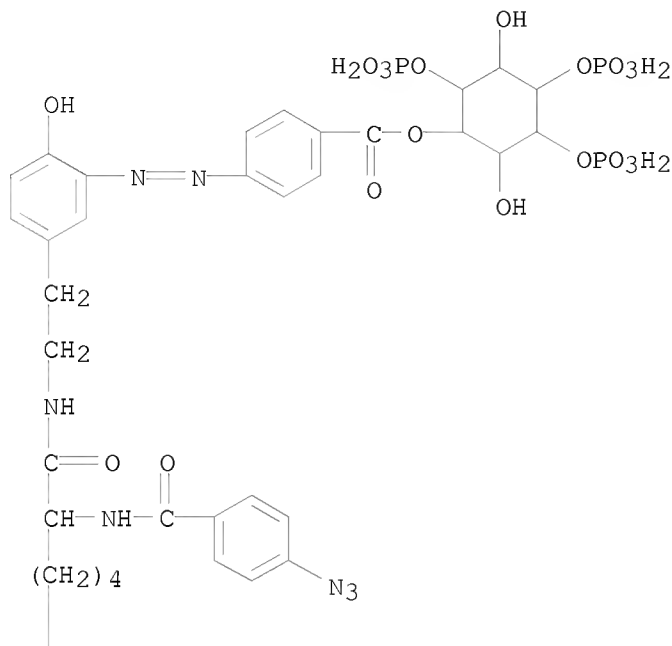
L8 ANSWER 30 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
 TI Interaction of antigenic peptides with MHC class I molecules on living  
 cells studied by photoaffinity labeling  
 IT 140158-18-5P  
 RL: PREP (Preparation)  
 (preparation of, histocompatibility class I antigen binding in relation to)  
 RN 140158-18-5 CAPLUS  
 CN L-Isoleucine, N-[N2-[N-[N-[N-[1-[N-[N-(4-azido-2-hydroxy-3-iodobenzoyl)-L-  
 tyrosyl]-L-isoleucyl]-L-prolyl]-L-seryl]-L-alanyl]-L- $\alpha$ -glutamyl]-N6-  
 [5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-L-lysyl]-,  
 [3aS-(3 $\alpha$ ,4 $\beta$ ,6 $\alpha$ )]- (9CI) (CA INDEX NAME)



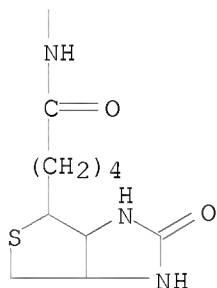
L8 ANSWER 31 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
 TI Synthesis and characterization of a photoaffinity probe possessing  
 IT biotinyl and azidobenzoyl moieties for IP3-affiliated protein  
 140220-70-8P  
 RL: PREP (Preparation)  
 (preparation and characterization of, as photoaffinity probe)  
 RN 140220-70-8 CAPLUS  
 CN D-myo-Inositol, 2-[4-[[5-[2-[[ (2S)-2-[(4-azidobenzoyl)amino]-6-[[5-

[(3a*S*, 4*S*, 6a*R*)-hexahydro-1*H*-thieno[3,4-*d*]imidazol-4-yl]-1-oxopentyl]amino]-  
1-oxohexyl]amino]ethyl]-2-hydroxyphenyl]azo]benzoate]  
1,4,5-tris(dihydrogen phosphate) (9CI) (CA INDEX NAME)

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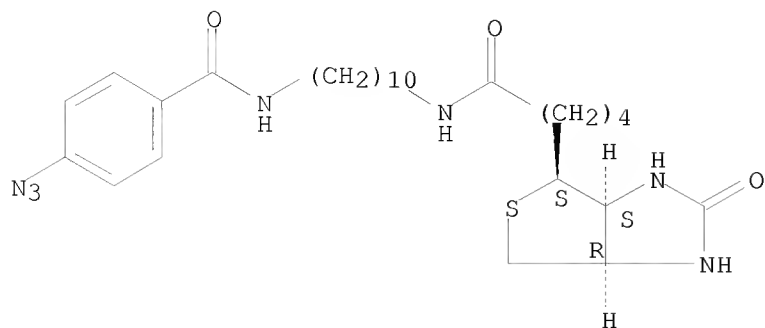


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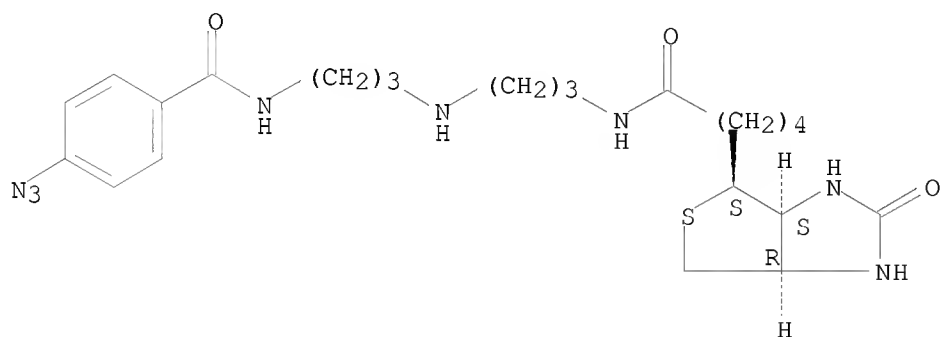
L8 ANSWER 32 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
 TI Azidobenzoyl-, azidoacridinyl-, diazocyclopentadienylcarbonyl- and  
 8-propyloxypsoralen photobiotinylation reagents. Syntheses and  
 photoreactions with DNA and protein  
 IT 134857-17-3P 134857-18-4P 134857-20-8P  
 134885-33-9P  
 RL: PREP (Preparation)  
 (preparation of, as photobiotinylation reagent, for DNA and protein)  
 RN 134857-17-3 CAPLUS  
 CN 1*H*-Thieno[3,4-*d*]imidazole-4-pentanamide,  
 N-[10-[(4-azidobenzoyl)amino]decyl]hexahydro-2-oxo-,  
 [3a*S*-(3a*α*, 4*β*, 6a*α*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 134857-18-4 CAPLUS  
 CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[3-[[3-[(4-azidobenzoyl)amino]propyl]amino]propyl]hexahydro-2-oxo-,  
 monohydrochloride, [3aS-(3aα,4β,6aα)]- (9CI) (CA INDEX  
 NAME)

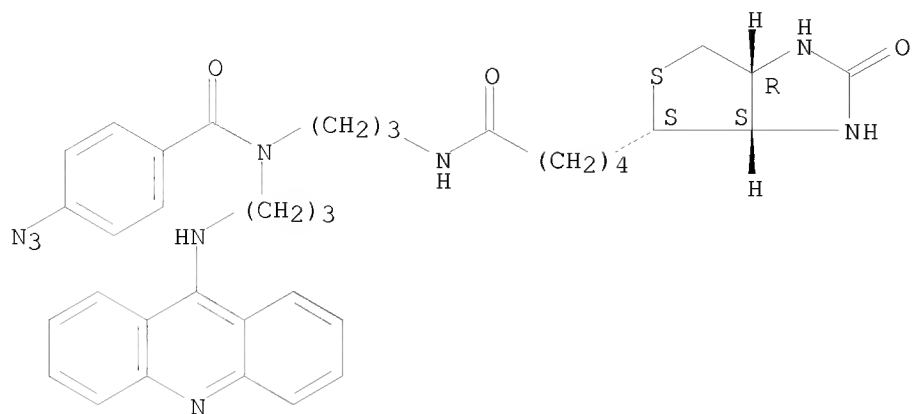
Absolute stereochemistry.



● HCl

RN 134857-20-8 CAPLUS  
 CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[3-[[3-(9-acridinylamino)propyl](4-azidobenzoyl)amino]propyl]hexahydro-2-  
 oxo-, [3aS-(3aα,4β,6aα)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

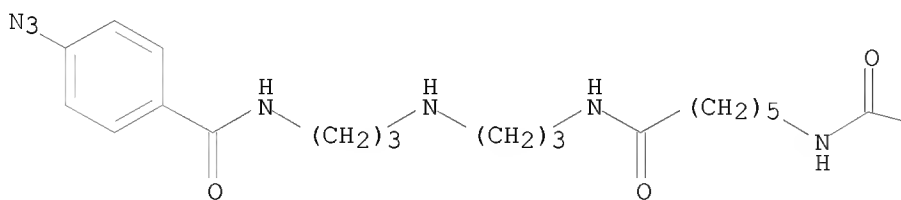


RN 134885-33-9 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[6-[[[3-[[[3-[(4-azidobenzoyl)amino]propyl]amino]propyl]amino]-6-oxohexyl]hexahydro-2-oxo-, dihydrochloride,  
[3aS-(3aα, 4β, 6aα)]- (9CI) (CA INDEX NAME)

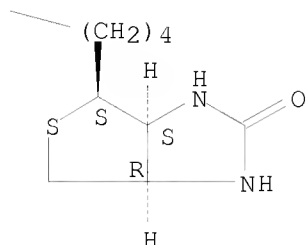
Absolute stereochemistry.

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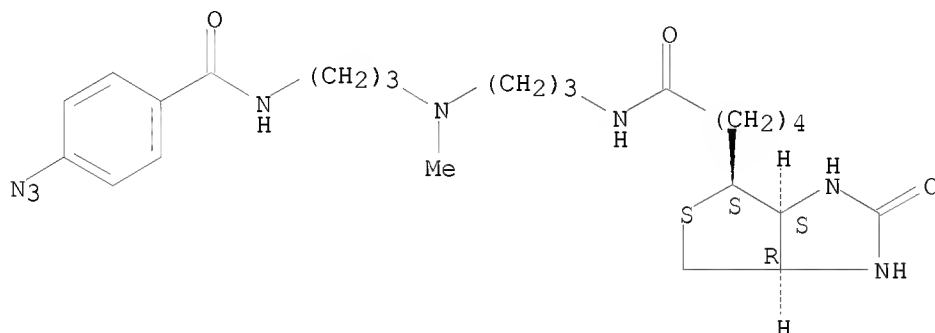
● 2 HCl





L8 ANSWER 33 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
 TI Non-radioactive biological probes  
 IT 101637-63-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as nonradioactive biol. probe)  
 RN 101637-63-2 CAPLUS  
 CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[3-[[3-[(4-azidobenzoyl)amino]propyl]methylamino]propyl]hexahydro-2-oxo-  
 , [3aS-(3 $\alpha$ ,4 $\beta$ ,6 $\alpha$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> d ibib abs hitstr 23-33

L8 ANSWER 23 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1993:512330 CAPLUS  
 DOCUMENT NUMBER: 119:112330  
 ORIGINAL REFERENCE NO.: 119:20113a,20116a  
 TITLE: Photoaffinity labeling of the T cell receptor on  
 living cytotoxic T lymphocytes  
 AUTHOR(S): Romero, Pedro; Maryanski, Janet L.; Luescher, Immanuel  
 F.  
 CORPORATE SOURCE: Lausanne Branch, Ludwig Inst. Cancer Res., Epalinges,  
 1066, Switz.  
 SOURCE: Journal of Immunology (1993), 150(9),  
 3825-31  
 CODEN: JOIMA3; ISSN: 0022-1767  
 DOCUMENT TYPE: Journal

AB Using a direct binding assay based on photoaffinity labeling, the authors studied the interaction of an antigenic peptide with MHC class I mols. and the TCR on living cells. Two photoreactive derivs. of the H-2Kd (Kd)-restricted Plasmodium berghei circumsporozoite (PbCS) peptide 253-260 (YIPSAEKI) were used. The first derivative contained an N-terminal photoreactive iodo, 4-azido salicyloyl (IASA) group and biotin on the TCR contact residue Lys259 [IASA-YIPSAEK(biotin)I]. As previously described, this derivative selectively bound to and labeled the Kd mol. The second photoreactive compound, the isomeric biotin-YIPSAEK(IASA)I, also efficiently bound to the Kd mol., but failed to label this protein. A CTL clone derived from a mouse immunized with this derivative recognize this conjugate but not the parental P. berghei circumsporozoite peptide or the [IASA-YIPSAEK-(biotin)I] derivative in an Kd-restricted manner. Incubation of the cloned CTL cells with biotin-YIPSAEK(IASA)I, but not its isomer, followed by UV irradiation resulted in photoaffinity labeling of the TCR- $\alpha$  chain that was dependent on the conjugate binding to the Kd mol. The TCR labeling was partially inhibited by anti-LFA 1 and anti-ICAM1 monoclonal antibodies, but was increased by addition of  $\beta$ 2m or soluble KdQ10. The exquisite labeling selectivity of the two photoprobes opens a new, direct approach to the mol. anal. of antigen presentation and recognition by living CTL.

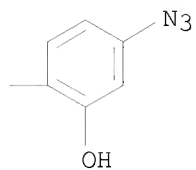
IT 147557-16-2 149235-89-2  
RL: BIOL (Biological study)  
(in photoaffinity labeling of T-cell receptor on cytotoxic T-lymphocytes)

RN 147557-16-2 CAPLUS

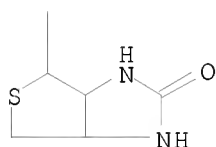
CN L-Isoleucine, N-[N6-(4-azido-2-hydroxyiodobenzoyl)-N2-[N-[N-[1-[N-[N-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-seryl]-L-alanyl]-L- $\alpha$ -glutamyl]-L-lysyl]-, [3aS-(3 $\alpha$ ,4 $\beta$ ,6 $\alpha$ )]- (9CI) (CA INDEX NAME)

[illegible]

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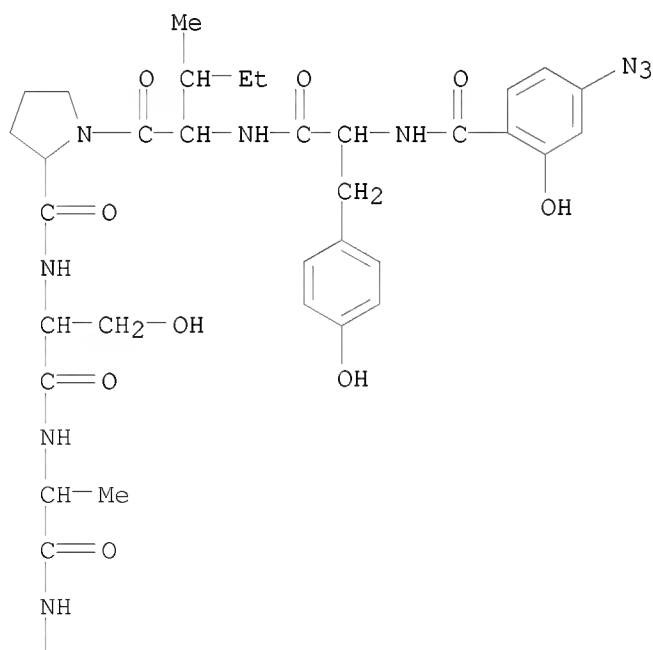
PAGE 2-A

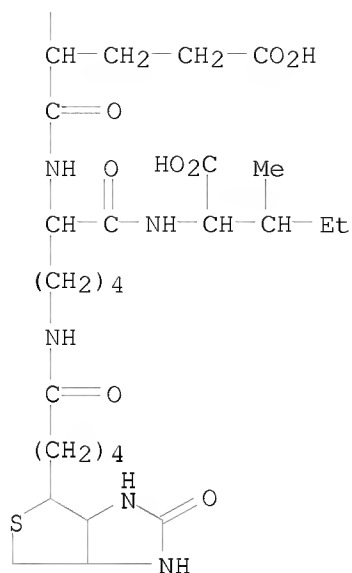


D1- I

RN 149235-89-2 CAPLUS  
 CN L-Isoleucine, N-[N2-[N-[N-[N-[1-[N-[N-(4-azido-2-hydroxyiodobenzoyl)-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-seryl]-L-alanyl]-L- $\alpha$ -glutamyl]-N6-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-L-lysyl]-, [3aS-(3 $\alpha$ ,4 $\beta$ ,6 $\alpha$ )]- (9CI) (CA INDEX NAME)

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## D1-I

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

L8 ANSWER 24 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1993:252873 CAPLUS

DOCUMENT NUMBER: 118:252873

ORIGINAL REFERENCE NO.: 118:43891a, 43894a

TITLE: Differential T cell receptor photoaffinity labeling  
among H-2Kd restricted cytotoxic T lymphocyte clones  
specific for a photoreactive peptide derivative.  
Labeling of the  $\alpha$ -chain correlates with Ja  
segment usage

AUTHOR(S): Romero, Pedro; Casanova, Jean Laurent; Cerottini, Jean  
Charles; Maryanski, Janet L.; Luescher, Immanuel F.

CORPORATE SOURCE: Lausanne Branch, Ludwig Inst. Cancer Res., Epalinges,  
1066, Switz.

SOURCE: Journal of Experimental Medicine (1993),  
177(5), 1247-56

CODEN: JEMEAV; ISSN: 0022-1007

DOCUMENT TYPE: Journal

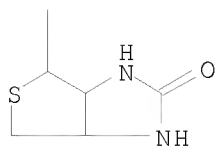
LANGUAGE: English

AB Using a direct binding assay based on photoaffinity labeling, the authors studied the interaction of T cell receptor (TCR) with a Kd-bound photoreactive peptide derivative on living cells. The Kd-restricted Plasmodium berghei circumsporozoite (PbCS) peptide 253-260 (YIPSAEKI) was reacted N-terminally with biotin and at the TCR contact residue Lys259 with photoreactive iodo,4-azido salicylic acid (IASA) to make biotin-YIPSAEK(IASA)I. Cytotoxic T lymphocyte (CTL) clones derived from mice immunized with this derivative recognized this conjugate, but not a related one lacking the IASA group nor the parental PbCS peptide. The clones were Kd-restricted. Recognition expts. with variant conjugates, lacking substituents from IASA, revealed a diverse fine specificity pattern and indicated that this group interacted directly with the TCR.

IT 147557-16-2 147794-88-5 147794-89-6  
RL: BIOL (Biological study)  
(cytotoxic T-lymphocyte to, TCR receptor  $\alpha$ -chain J segment usage  
by)

CN L-Isoleucine, N-[N6-(4-azido-2-hydroxyiodobenzoyl)-N2-[N-[N-[N-[1-[N-[N-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-seryl]-L-alanyl]-L- $\alpha$ -glutamyl]-L-lysyl]-, [3aS-(3a $\alpha$ ,4 $\beta$ ,6a $\alpha$ )]-(9CI) (CA INDEX NAME)

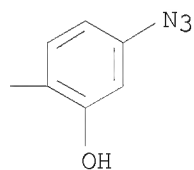
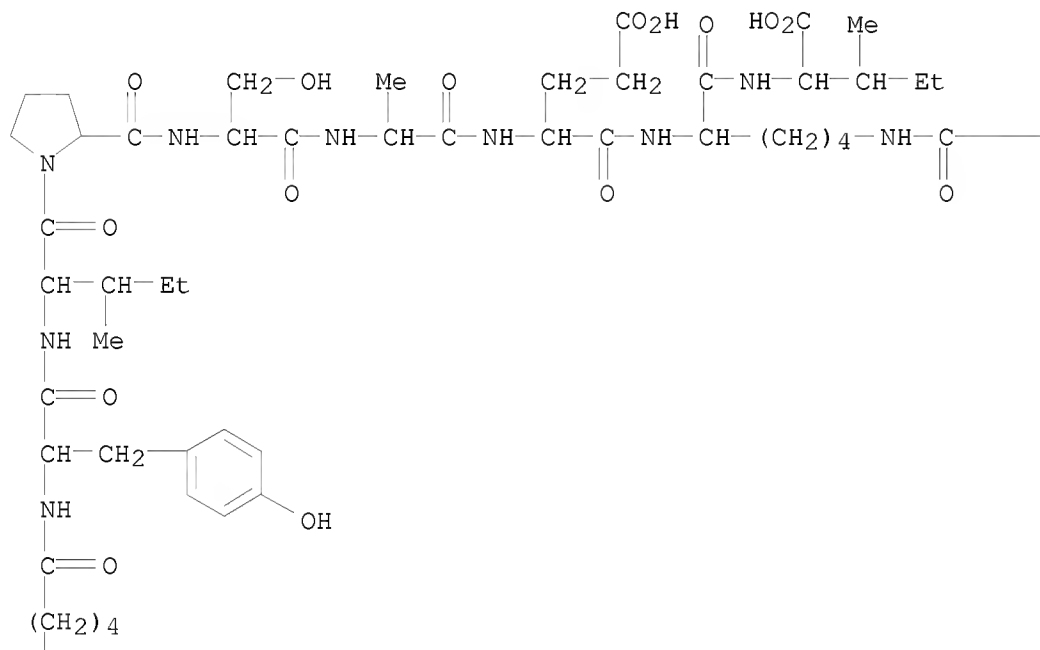
[illegible]Nc1ccc(O)cc1

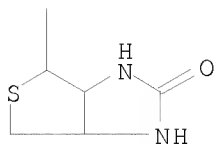


D1- I

RN 147794-88-5 CAPLUS

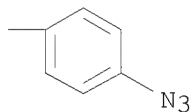
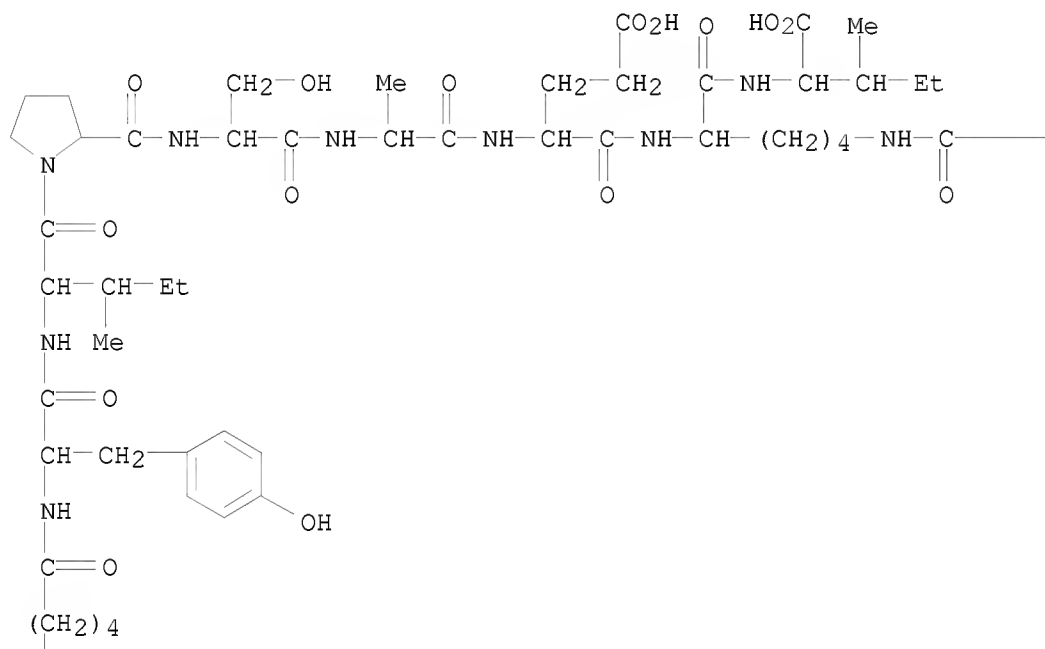
CN L-Isoleucine, N-[N6-(4-azido-2-hydroxybenzoyl)-N2-[N-[N-[N-[1-[N-[N-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-seryl]-L-alanyl]-L- $\alpha$ -glutamyl]-L-lysyl]-, [3aS-(3 $\alpha$ , 4 $\beta$ , 6 $\alpha$ )]- (9CI) (CA INDEX NAME)

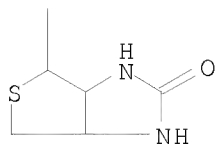




RN 147794-89-6 CAPLUS

CN L-Isoleucine, N-[N6-(4-azidobenzoyl)-N2-[N-[N-[1-[N-[N-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-seryl]-L-alanyl]-L- $\alpha$ -glutamyl]-L-lysyl]-, [3aS-(3 $\alpha$ , 4 $\beta$ , 6 $\alpha$ )]- (9CI) (CA INDEX NAME)





OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L8 ANSWER 25 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1993:183656 CAPLUS

DOCUMENT NUMBER: 118:183656

ORIGINAL REFERENCE NO.: 118:31259a,31262a

TITLE: Design and synthesis of heterofunctional V1a-selective vasopressin receptor ligands with lysine at position 9  
 AUTHOR(S): Howl, J.; New, D. C.; Wheatley, M.  
 CORPORATE SOURCE: Sch. Biochem., Univ. Birmingham, Edgbaston/Birmingham, B15 2TT, UK

SOURCE: Journal of Molecular Endocrinology (1992), 9(2), 123-9

CODEN: JMLEEI; ISSN: 0952-5041

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A peptide analog of AVP with Lys substituted for Gly at position 9 ([d(CH2)5Tyr(Me)2LysNH29]AVP; ALVP) has been synthesized as a precursor for the production of heterofunctional vasopressin receptor ligands. Three heterofunctional ligands have been prepared by attaching biotin and a photoreactive cross-linker capable of iodination (azidosalicylate), either alone or in combination, to the ε-amino group of Lys at position 9 in ALVP. The binding characteristics of these novel ligands have been determined at the V1a and V2 vasopressin receptors by employing membrane preps. of rat liver and kidney, resp. All of the analogs synthesized during the course of this study bound selectively, and with high affinity, to the V1a vasopressin receptor subtype. The results demonstrate that the strategies described in this paper provide a convenient means of synthesizing heterofunctional vasopressin receptor ligands with preservation of subtype-specific, high-affinity binding characteristics. These parameters establish the potential value of the analogs as probes for investigating V1a receptor structure and function.

IT 147023-69-6P

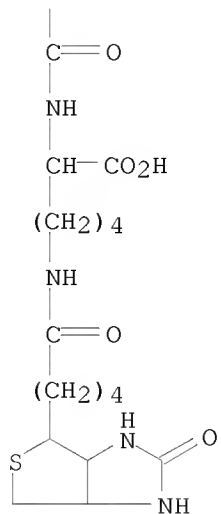
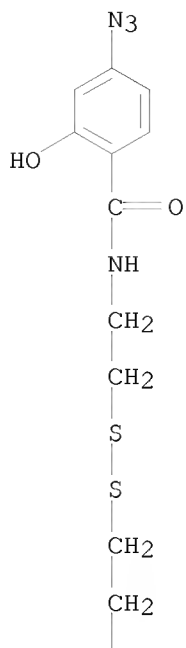
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with N-terminal lysine-substituted AVP analog)

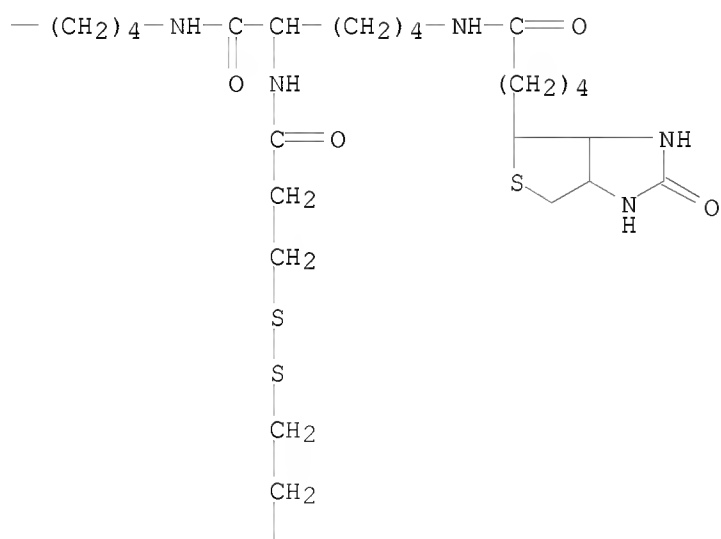
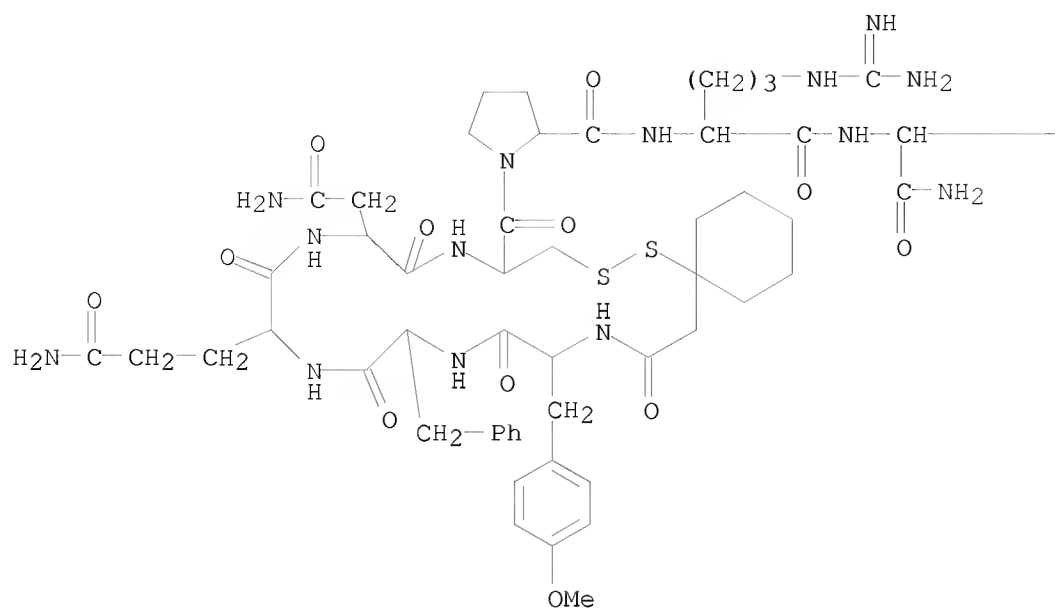
RN 147023-69-6 CAPLUS

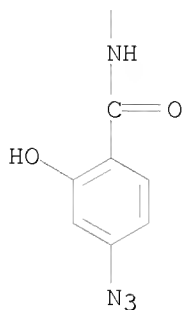
CN L-Lysine, N2-[3-[[2-[(4-azido-2-hydroxybenzoyl)amino]ethyl]dithio]-1-oxopropyl]-N6-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-, [3aS-(3aα,4β,6aα)]- (9CI) (CA INDEX NAME)





IT 147041-32-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as vasopressinergic V1a receptor ligand)  
 RN 147041-32-5 CAPLUS  
 CN L-Lysinamide, N-[(1-mercaptopcyclohexyl)acetyl]-O-methyl-L-tyrosyl-L-phenylalanyl-L-glutamyl-L-asparagyl-L-cysteinyl-L-prolyl-L-arginyl-N6-[N2-[3-[2-[(4-azido-2-hydroxybenzoyl)amino]ethyl]dithio]-1-oxopropyl]-N6-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]-L-lysyl]-, cyclic (1→5)-disulfide (9CI) (CA INDEX NAME)





OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

L8 ANSWER 26 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1993:164106 CAPLUS

DOCUMENT NUMBER: 118:164106

ORIGINAL REFERENCE NO.: 118:28021a,28024a

TITLE: Attaching analytes in the proximity of the active site  
of enzymes

AUTHOR(S): MacLean, Alynne I.; Cynkowski, Tadeusz; Bachas,  
Leonidas G.

CORPORATE SOURCE: Dep. Chem., Univ. Kentucky, Lexington, KY, 40506, USA

SOURCE: Journal of the Chemical Society, Chemical

Communications (1992), (18), 1283-5

CODEN: JCCCAT; ISSN: 0022-4936

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A trifunctional compound, incorporating a photolabel, a coenzyme, and an  
analyte of interest, is synthesized and used to prepare an enzyme reagent  
that had been modified near its active site. Glucose-6-phosphate  
dehydrogenase was chemical modified with the reagent.

IT 146690-72-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

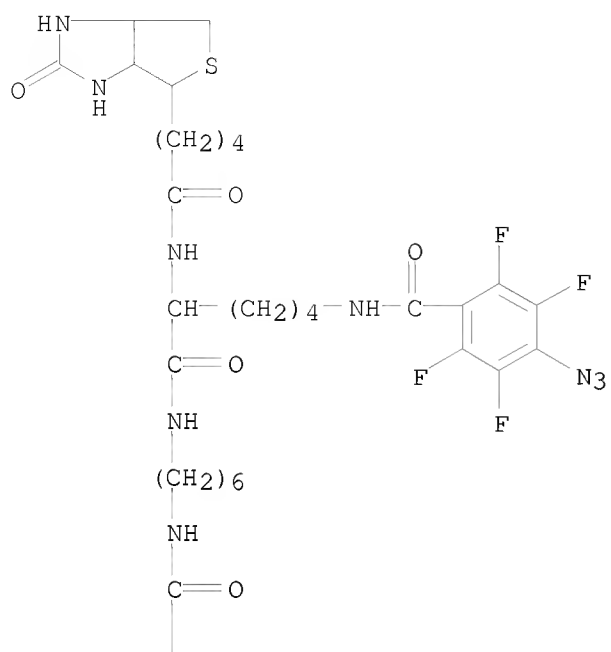
(preparation and glucose phosphate dehydrogenase photolabeling by)

RN 146690-72-4 CAPLUS

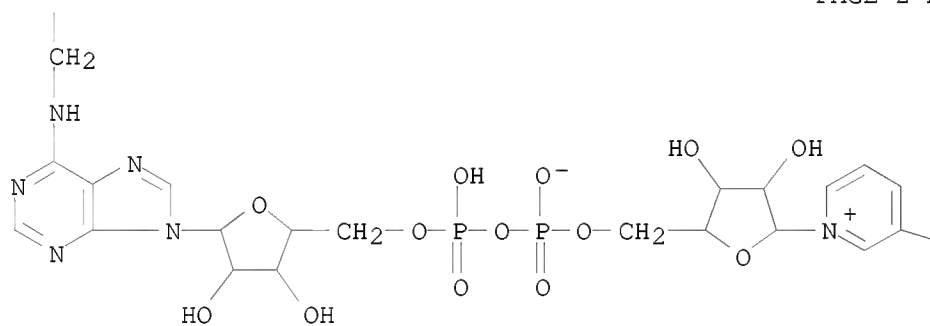
CN Adenosine 5'-(trihydrogen diphosphate),

N-[2-[[[6-[[[6-[(4-azido-2,3,5,6-tetrafluorobenzoyl)amino]-2-[[5-(hexahydro-  
2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-1-  
oxohexyl]amino]hexyl]amino]-2-oxoethyl]-, P'→5'-ester with  
3-(aminocarbonyl)-1-β-D-ribofuranosylpyridinium inner salt,  
[3aS-(3aα,4β,6aα)]- (9CI) (CA INDEX NAME)

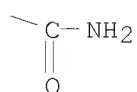
PAGE 1-A



PAGE 2-A



PAGE 2-B



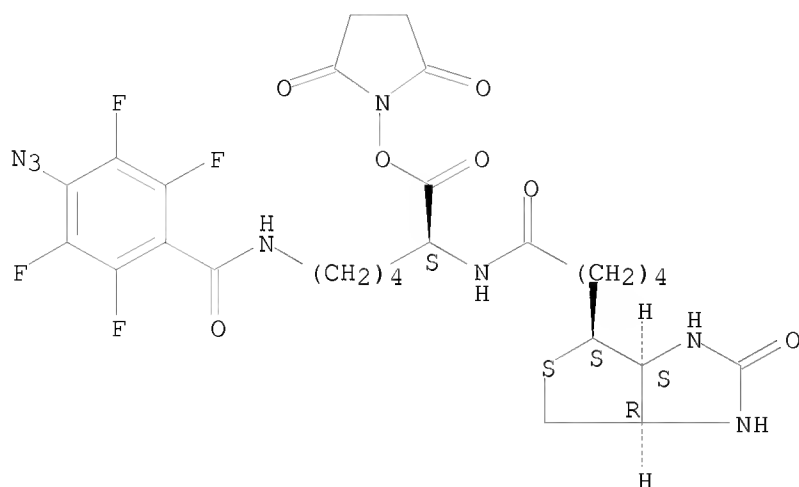
IT 146690-73-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(preparation and reaction with NAD derivative)

RN 146690-73-5 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[5-[(4-azido-2,3,5,6-tetrafluorobenzoyl)amino]-1-[[ (2,5-dioxo-1-pyrrolidinyl)oxy]carbonyl]pentyl]hexahydro-2-oxo-,  
[3aS-[3aα,4β(R\*),6aα]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



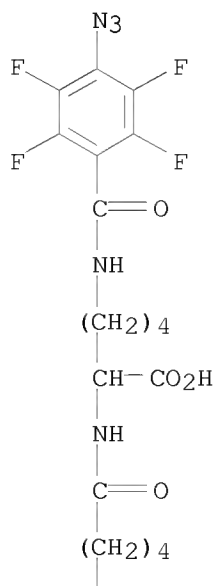
IT 146672-32-4P

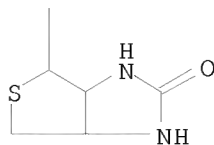
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation and succinimidylation of)

RN 146672-32-4 CAPLUS

CN L-Lysine, N6-(4-azido-2,3,5,6-tetrafluorobenzoyl)-N2-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-,  
[3aS-(3aα,4β,6aα)]- (9CI) (CA INDEX NAME)

PAGE 1-A





OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L8 ANSWER 27 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1993:102348 CAPLUS

DOCUMENT NUMBER: 118:102348

ORIGINAL REFERENCE NO.: 118:17949a,17952a

TITLE: Synthesis and biological properties of 2-substituted myo-inositol 1,4,5-trisphosphate analogs directed toward affinity chromatography and photoaffinity labeling

AUTHOR(S): Ozaki, Shoichiro; Watanabe, Yutaka; Ogasawara, Tomio; Hirata, Masato; Kanematsu, Takashi

CORPORATE SOURCE: Fac. Eng., Ehime Univ., Matsuyama, 790, Japan

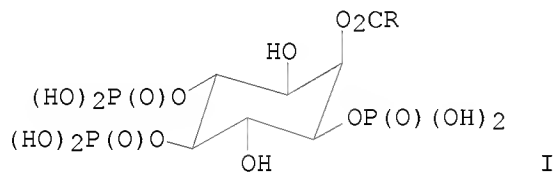
SOURCE: Carbohydrate Research (1992), 234, 189-206

CODEN: CRBRAT; ISSN: 0008-6215

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB myo-Inositol 1,4,5-trisphosphate analogs I (R = 4-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, 4-N<sub>3</sub>C<sub>6</sub>H<sub>4</sub>, 4-[2,5-HO(BzNHCH<sub>2</sub>CH<sub>2</sub>)C<sub>6</sub>H<sub>3</sub>N:N]C<sub>6</sub>H<sub>4</sub>, cis- and trans-4-aminocyclohexyl) were synthesized and examined for their effects on the 5-phosphatase-, the 3-kinase-, the tritiated trisphosphate-binding activity, and the Ca<sup>2+</sup>-releasing activity. Each I inhibited the hydrolysis and the phosphorylation of D-inositol-1,4,5-triphosphate (II), catalyzed by erythrocyte ghosts and brain cytosol, resp. I acted as full agonists in releasing Ca<sup>2+</sup> from permeabilized cells and also inhibited the binding of II to cerebellum microsomes. I (R = 4-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>, cis- and trans-4-aminocyclohexyl) were utilized for immobilization of the trisphosphate on Sepharose and the subsequent affinity chromatog. effected purification of the above proteins. A photoaffinity probe, the appendage of which acted as the photoaffinity probe as well as a nonradioactive mol. marker, was also derived from I (R = 4-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>).

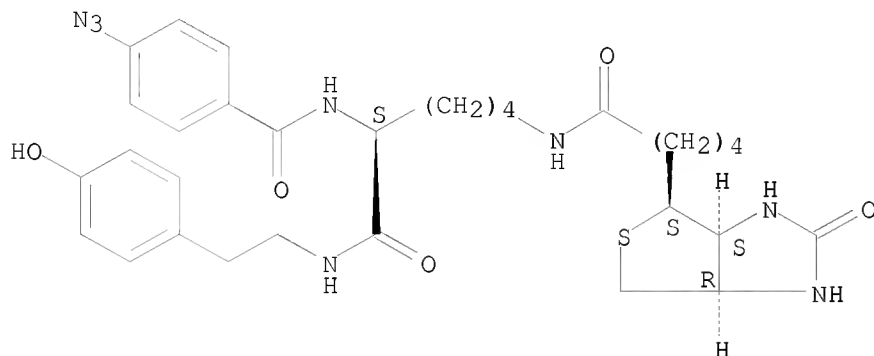
IT 135417-95-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with inositol phosphate diazobenzoate)

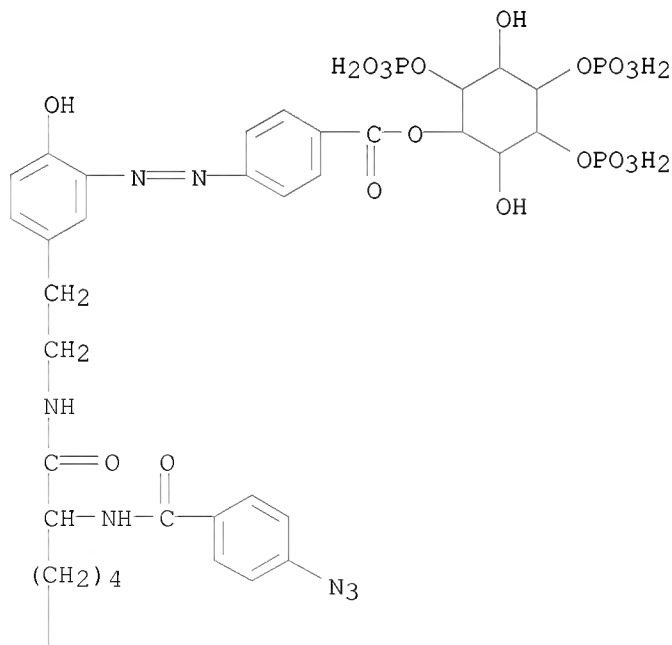
RN 135417-95-7 CAPLUS  
 CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[5-[(4-azidobenzoyl)amino]-6-[[2-(4-hydroxyphenyl)ethyl]amino]-6-oxohexyl]hexahydro-2-oxo-, [3aS-[3a $\alpha$ , 4 $\beta$ (R\*), 6a $\alpha$ ]]- (9CI)  
 (CA INDEX NAME)

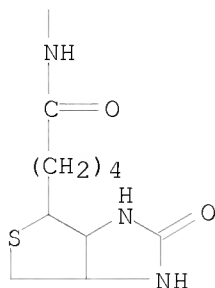
Absolute stereochemistry.



IT 140220-70-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as photoaffinity probe)  
 RN 140220-70-8 CAPLUS  
 CN D-myo-Inositol, 2-[4-[[5-[2-[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]-2-hydroxyphenyl]azo]benzoate] 1,4,5-tris(dihydrogen phosphate) (9CI) (CA INDEX NAME)

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OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD  
(7 CITINGS)

L8 ANSWER 28 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1992:524706 CAPLUS

DOCUMENT NUMBER: 117:124706

ORIGINAL REFERENCE NO.: 117:21461a, 21464a

TITLE: Synthesis and characterization of biotinylated and photoactivatable neuroleptics. Novel bifunctional probes for dopamine receptors

AUTHOR(S): Soskic, Vukic; Maelicke, Alfred

CORPORATE SOURCE: Fac. Sci., Univ. Belgrade, Belgrade, 11000, Yugoslavia

SOURCE: European Journal of Pharmacology, Molecular Pharmacology Section (1992), 226(2), 109-20  
CODEN: EJPPET; ISSN: 0922-4106

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The authors synthesized and characterized a series of novel derivs. of established antagonists of the neurotransmitter dopamine, i.e. butyrophenones [I and II, X = O, NOCH<sub>2</sub>CONHMe, etc.; R = H, (CH<sub>2</sub>)<sub>2</sub>C<sub>6</sub>H<sub>4</sub>N<sub>3</sub>-4], hexahydrocarbolines [III, R = H, CO(CH<sub>2</sub>)<sub>5</sub>NH-Bi; Bi = biotinyl] and phenothiazines (IV, RR<sub>1</sub> = H<sub>2</sub>, COC<sub>6</sub>H<sub>4</sub>CO-4, etc.). All derivs. were biotinylated, some of them carried an addnl. (photoactivatable) azido group. In the case of butyrophenones, the structural modifications were introduced at the aliphatic keto group and/or the heterocyclic ring system, both modifications resulting in decreases in binding affinity to dopamine D<sub>2</sub> and dopamine D<sub>1</sub> receptor subtypes. Biotinylation of hexahydrocarbolines increased their binding affinity to D<sub>1</sub> receptors, with the affinity for D<sub>2</sub> receptors increasing only slightly, or remaining approx. the same, as compared to the parent compound. As a consequence, the derivatized hexahydrocarbolines behaved as nonselective antagonists of dopamine. Biotinylation of phenothiazines increased their binding affinity to both main subtypes of dopamine receptors by at least 1 order of magnitude, resulting in binding affinities in the nM range. These derivs. bound to both D<sub>1</sub> and D<sub>2</sub> receptor subtypes. In 3 of the biotinylated derivs. the photoactivatable azido group was introduced. These compds. bound to synaptosomal membranes from bovine caudate nuclei with similar affinity and subtype specificity as the biotinylated derivs., and photoaffinity labeling was shown to proceed under mild conditions and selectively. These novel bifunctional ligands may become useful tools in the purification and characterization of dopamine receptors including their visualization and localization in the central nervous system and in tissue



culture.

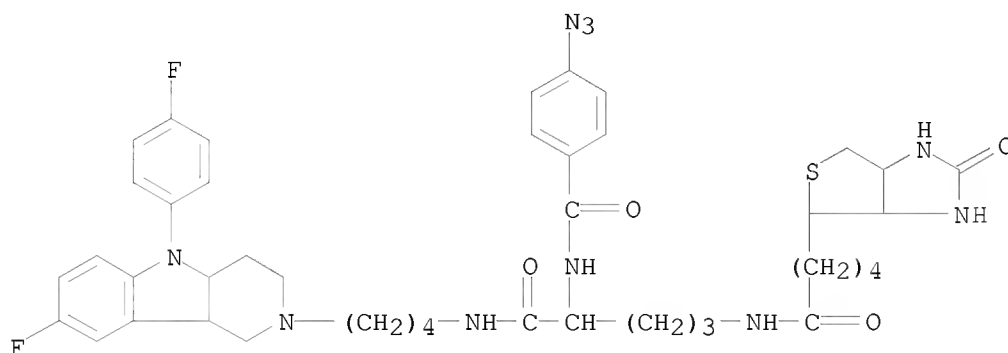
IT 143035-00-1P 143035-04-5P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and dopamine receptor affinity of, structure in relation to)

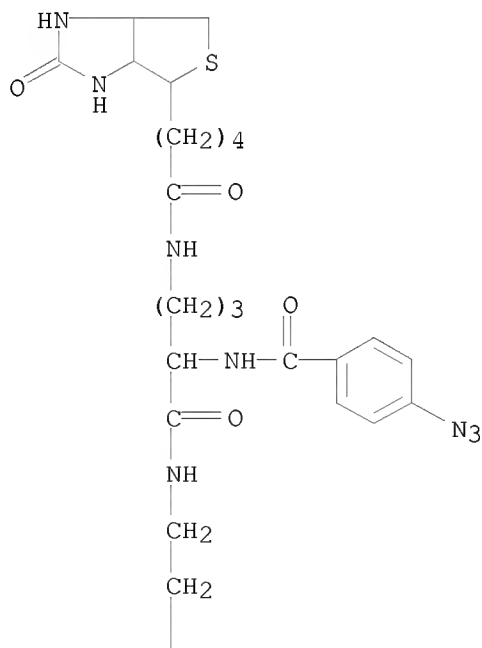
RN 143035-00-1 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[4-[(4-azidobenzoyl)amino]-5-[[4-[8-fluoro-5-(4-fluorophenyl)-  
1,3,4,4a,5,9b-hexahydro-2H-pyrido[4,3-b]indol-2-yl]butyl]amino]-5-  
oxopentyl]hexahydro-2-oxo- (CA INDEX NAME)

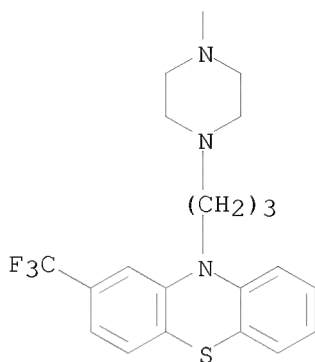


RN 143035-04-5 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[4-[(4-azidobenzoyl)amino]-5-oxo-5-[[2-[4-[3-[2-(trifluoromethyl)-10H-  
phenothiazin-10-yl]propyl]-1-piperazinyl]ethyl]amino]pentyl]hexahydro-2-  
oxo- (CA INDEX NAME)

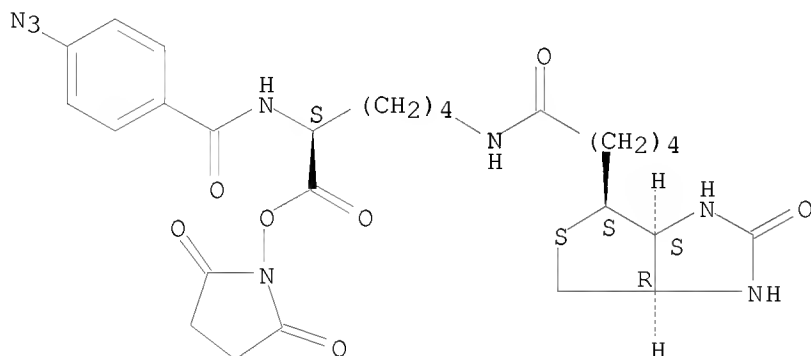


PAGE 1-A



IT 143304-60-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with hexahydrocarboline derivative)  
 RN 143304-60-3 CAPLUS  
 CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[5-[(4-azidobenzoyl)amino]-6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]hexahydro-2-oxo-, [3aS-[3a $\alpha$ ,4 $\beta$ (R\*),6a $\alpha$ ]]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

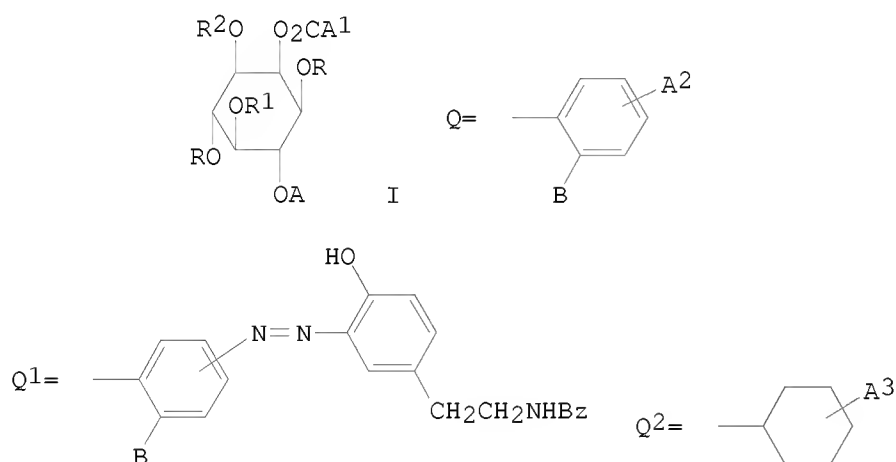


L8 ANSWER 29 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1992:490704 CAPLUS  
 DOCUMENT NUMBER: 117:90704  
 ORIGINAL REFERENCE NO.: 117:15853a,15856a  
 TITLE: Preparation of inositol polyphosphate derivatives for  
 control of the calcium ion-participating metabolic  
 steps  
 INVENTOR(S): Ozaki, Shoichiro; Watanabe, Yutaka; Hirata, Masato;  
 Awaya, Akira  
 PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan  
 SOURCE: PCT Int. Appl., 139 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9104258	A1	19910404	WO 1990-JP1228	19900925 <--
W: US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
EP 445299	A1	19910911	EP 1990-913864	19900925 <--
R: CH, DE, FR, GB, IT, LI				
JP 04178394	A	19920625	JP 1990-251804	19900925 <--
US 5252707	A	19931012	US 1991-700152	19910515 <--
PRIORITY APPLN. INFO.:			JP 1989-245161	A 19890922
			JP 1990-210263	A 19900810
			WO 1990-JP1228	W 19900925

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT  
OTHER SOURCE(S): MARPAT 117:90704  
GI

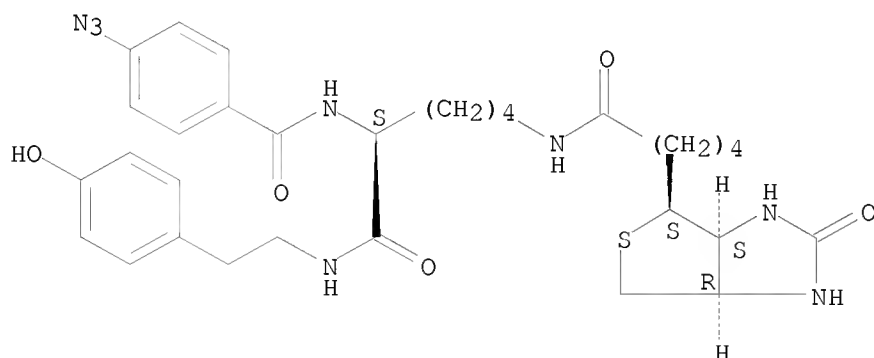


AB The title compds. [I; A = H; R, R<sub>1</sub> = (un)protected P(O)(OH)<sub>2</sub> and R<sub>2</sub> = H; R, R<sub>2</sub> = (un)protected P(O)(OH)<sub>2</sub>, R<sub>1</sub> = H; or R, R<sub>1</sub>, R<sub>2</sub> = (un)protected P(O)(OH)<sub>2</sub>; A<sub>1</sub> = (CH<sub>2</sub>)<sub>n</sub>CHR<sub>3</sub>NH<sub>2</sub>, Q, Q<sub>1</sub>, Q<sub>2</sub>, (CH<sub>2</sub>)<sub>n</sub>CHR<sub>3</sub>N:CR<sub>4</sub>N<sub>5</sub>, (CH<sub>2</sub>)<sub>n</sub>CHR<sub>3</sub>NHCO<sub>2</sub>R<sub>6</sub>, etc.; n = 0-5; R<sub>3</sub> = H, (hydroxy)alkyl; (p-hydroxy)phenyl, (p-hydroxy)benzyl, 3-methylindolyl, 5-methylimidazolyl, etc.; R<sub>4</sub>, R<sub>5</sub>, R<sub>6</sub> = H, alkyl, alkenyl, alkynyl, (un)substituted Ph or cyclohexyl; A<sub>2</sub>, A<sub>3</sub> = N<sub>3</sub>, NH<sub>2</sub>, N:CR<sub>4</sub>R<sub>5</sub>, NHCHR<sub>4</sub>R<sub>5</sub>, etc.; B = H, NH<sub>2</sub>, NHCOCF<sub>3</sub>] which are used as drugs having 1,3,4-IP<sub>3</sub>-, IP<sub>3</sub>-, or IP<sub>4</sub>- (IP<sub>3</sub>, IP<sub>4</sub> = inositol tri-orthotetraphosphate, resp.) like activities or antagonizing the activities of 1,3,4-IP<sub>3</sub>, IP<sub>3</sub>, or IP<sub>4</sub> formed in vivo, and conjugates of I with polypeptides or proteins which are used as diagnostic agents and health foods, are prepared I immobilized on a solid support are also prepared and can be used for separation and purification of IP<sub>3</sub> phosphatase, IP<sub>4</sub> phosphatase, IP<sub>3</sub> kinase, IP<sub>4</sub> kinase, IP<sub>3</sub> receptor and IP<sub>4</sub> receptor. Addnl. prepared are I linked to biotin or a fluorescent substance useful as biotin-avidin complex probes of fluorescent probes for studying the structure-activity relationship, the mechanism of action, or the search of the active site of proteins having affinity towards inositol phosphate-related phosphatase, kinase, and receptors. Thus, hydrogenation of I [A = R<sub>2</sub> = CH<sub>2</sub>Ph, R = R<sub>1</sub> = P(O)(OCH<sub>2</sub>Ph)<sub>2</sub>, A<sub>1</sub> = p-(O<sub>2</sub>N)C<sub>6</sub>H<sub>4</sub>CO] over 5% Pd/C in aqueous MeOH containing AcONH<sub>4</sub> gave 100% I [A = R<sub>2</sub> = H, R = R<sub>1</sub> = P(O)(OH)<sub>2</sub>, A<sub>1</sub> = p-(H<sub>2</sub>N)C<sub>6</sub>H<sub>4</sub>CO] as the NH<sub>3</sub> salt (II) which was hydrogenated over RuO<sub>2</sub> in H<sub>2</sub>O at 80 atm H and 60° to give I [A = R<sub>2</sub> = H, R = R<sub>1</sub> = P(O)(OH)<sub>2</sub>, A<sub>1</sub> = 4-aminocyclohexanecarbonyl] as the NH<sub>3</sub> salt (III). II

and III in vitro showed IC<sub>50</sub> of 3 and 4.2 nM for inhibiting the binding of [3H]IP<sub>3</sub> to the microsome of bovine adrenal cortex, resp. vs. 1.4 nM for IP<sub>3</sub> and EC<sub>50</sub> of 1.6 and 1.2 μM, resp. for releasing Ca<sup>2+</sup> from microphages of guinea pigs abdominal cavity vs. 0.2 μM for IP<sub>3</sub>.

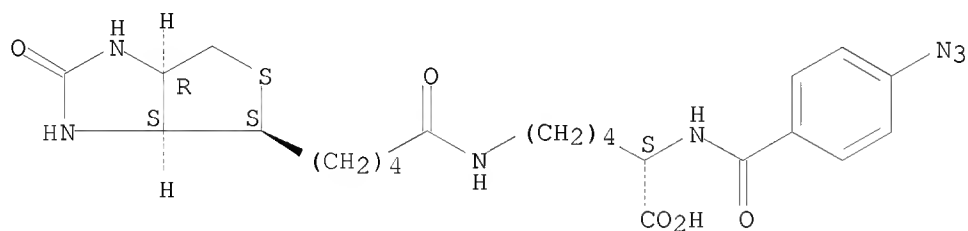
IT 135417-95-7P 135442-12-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation and reaction of, in preparation of inositol triphosphate-bound biotin-avidin complex probe)  
 RN 135417-95-7 CAPLUS  
 CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[5-[(4-azidobenzoyl)amino]-6-[[2-(4-hydroxyphenyl)ethyl]amino]-6-oxohexyl]hexahydro-2-oxo-, [3aS-[3α,4β(R\*),6α]]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

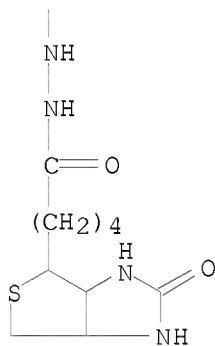
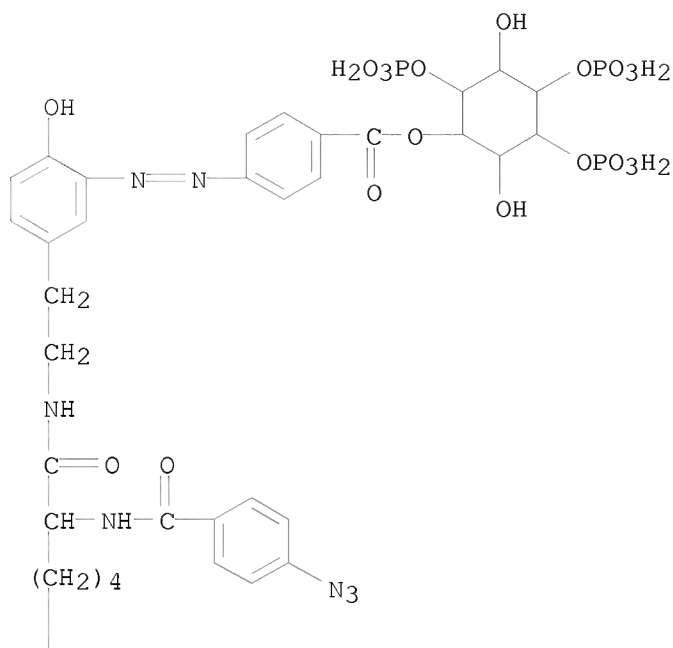


RN 135442-12-5 CAPLUS  
 CN L-Lysine, N2-(4-azidobenzoyl)-N6-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]-imidazol-4-yl)-1-oxopentyl]-, [3aS-(3α,4β,6α)]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.



IT 135442-10-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (preparation of, as biotin-avidin complex probe)  
 RN 135442-10-3 CAPLUS  
 CN D-myo-Inositol, 2-[4-[[5-[2-[[2S]-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]-2-hydroxyphenyl]azo]benzoate]  
 1,4,5-tris(dihydrogen phosphate), monopotassium salt (9CI) (CA INDEX NAME)



● K

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)  
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 30 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1992:405658 CAPLUS

DOCUMENT NUMBER: 117:5658

ORIGINAL REFERENCE NO.: 117:1179a,1182a

TITLE: Interaction of antigenic peptides with MHC class I molecules on living cells studied by photoaffinity labeling

AUTHOR(S): Luescher, Immanuel F.; Loez, Jose Alejandro; Malissen,

CORPORATE SOURCE: Bernard; Cerottini, Jean Charles  
Lausanne Branch, Ludwig Inst. Cancer Res., Epalinges,  
1066, Switz.  
SOURCE: Journal of Immunology (1992), 148(4),  
1003-11  
CODEN: JOIMA3; ISSN: 0022-1767  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB Using a direct binding assay based on photoaffinity labeling, the authors studied the interaction of antigenic peptides with murine MHC class I mols. on living cells. Photoreactive derivs. were prepared by N-terminal amidation with iodo, 4-azido salicylic acid of the Kd restricted Plasmodium berghei circumsporozoite (P.b. CS) peptide 253-260 (YIPSAEKI) and the Db-restricted adenovirus 5 early region 1A (Ad5 E1A) peptide 234-243 (SGPSNTPPEI). As assessed in functional competition expts., both peptide derivs. retained the specific binding activity of the parental peptides for Kd or Db, resp. The P.b. CS photoprobe specifically labeled Kd mols. on P815 (H-2d) cells, but failed to label RMA (H-2b) cells. Conversely, the Ad5 E1A photoprobe specifically labeled Db mols. on RMA cells, but failed to label P815 cells. When the two photoprobes were tested on a panel of Con A-activated spleen cells expressing 10 different H-2 haplotypes, significant photoaffinity labeling was observed only on H-2d cells with the P.b. CS photoprobe and on H-2b cells with the Ad5 E1A photoprobe. Labeling of cell-associated Kd or Db mols. with the photoprobes was specifically inhibited by antigenic peptides known to be presented by the same class I mol. Photoaffinity labeling of Kd with the P.b. CS photoprobe was used to study the dynamics of peptide binding on living P815 cells. Binding increased steadily with the incubation period (up to 8 h) at 37° and at ambient temperature, but was greatly reduced (>95%) at 0 to 4° or in the presence of ATP synthesis inhibitors. The magnitude of the labeling was twofold higher at room temperature than at 37°. In contrast, binding to isolated Kd mols. in solution rapidly reached maximal binding, particularly at 37°. Dissociation of the photoprobe from either cell-associated or soluble Kd mols. was similar, with a half time of .apprx.1 h at 37°, whereas the complexes were long-lived at 4° in both instances.

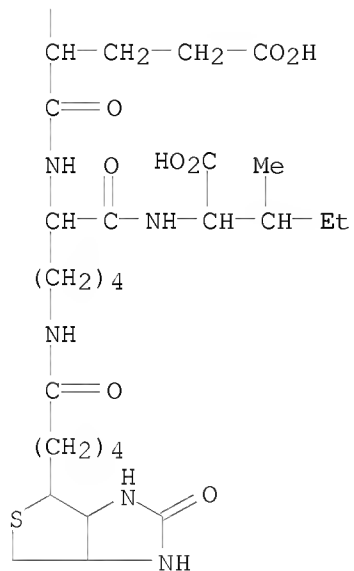
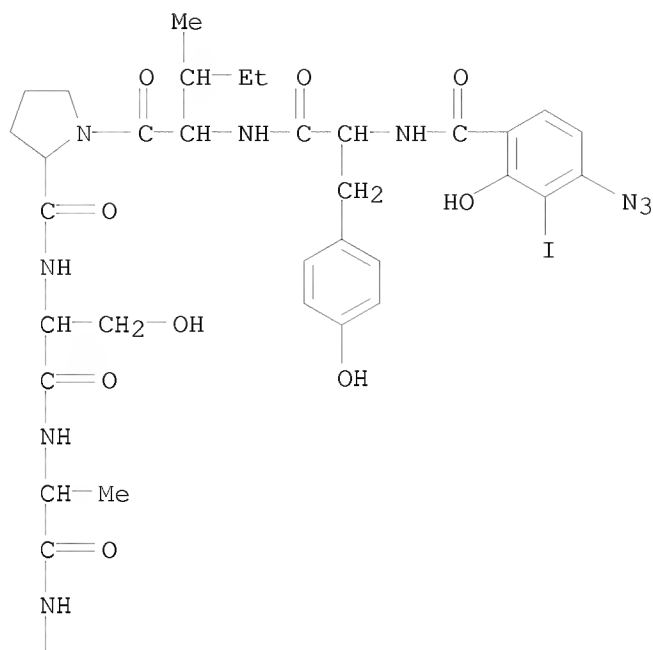
IT 140158-18-5P

RL: PREP (Preparation)

(preparation of, histocompatibility class I antigen binding in relation to)

RN 140158-18-5 CAPLUS

CN L-Isoleucine, N-[N2-[N-[N-[N-[1-[N-[N-(4-azido-2-hydroxy-3-iodobenzoyl)-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-seryl]-L-alanyl]-L-α-glutamyl]-N6-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-L-lysyl]-, [3aS-(3α,4β,6α)]- (9CI) (CA INDEX NAME)



OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

L8 ANSWER 31 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1992:169533 CAPLUS

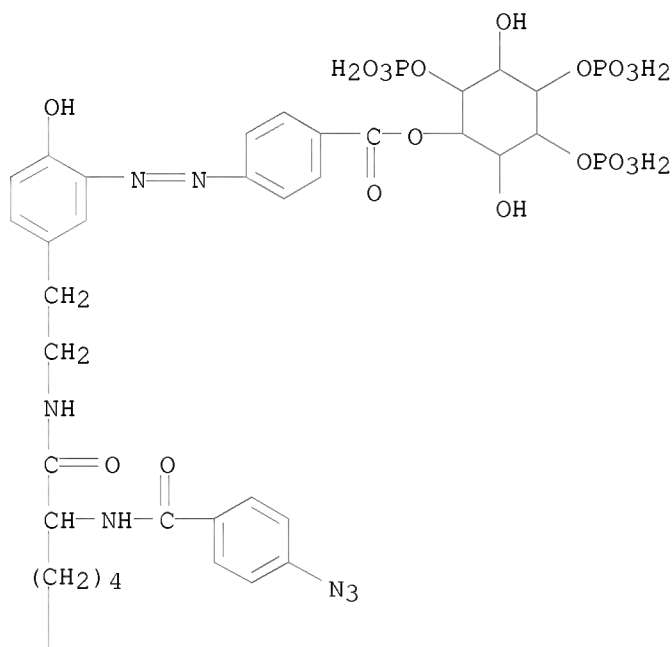
DOCUMENT NUMBER: 116:169533

ORIGINAL REFERENCE NO.: 116:28563a, 28566a

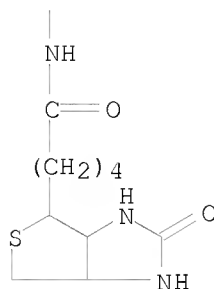
TITLE: Synthesis and characterization of a photoaffinity probe possessing biotinyl and azidobenzoyl moieties

AUTHOR(S): for IP3-affiliated protein  
 Watanabe, Yutaka; Hirata, Masato; Ogasawara, Tomio;  
 Koga, Toshitaka; Ozaki, Shoichiro  
 CORPORATE SOURCE: Fac. Eng., Ehime Univ., Matsuyama, 790, Japan  
 SOURCE: Bioorganic & Medicinal Chemistry Letters (1991  
 ), 1(8), 399-402  
 CODEN: BMCLE8; ISSN: 0960-894X  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB A myo-inositol 1,4,5-tris(phosphate) analog bearing p-azidobenzoyl and  
 biotinyl moieties has been prepared and shown to act as a photoaffinity  
 probe for myo-inositol 1,4,5-tris(phosphate) 5-phosphatase.  
 IT 140220-70-8P  
 RL: PREP (Preparation)  
 (preparation and characterization of, as photoaffinity probe)  
 RN 140220-70-8 CAPLUS  
 CN D-myo-Inositol, 2-[4-[[5-[2-[[ (2S)-2-[(4-azidobenzoyl)amino]-6-[[5-  
 [(3aS,4S,6aR)-hexahydro-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-  
 1-oxohexyl]amino]ethyl]-2-hydroxyphenyl]azo]benzoate]  
 1,4,5-tris(dihydrogen phosphate) (9CI) (CA INDEX NAME)

PAGE 1-A







OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
(5 CITINGS)

L8 ANSWER 32 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1991:467675 CAPLUS

DOCUMENT NUMBER: 115:67675

ORIGINAL REFERENCE NO.: 115:11591a,11594a

TITLE: Azidobenzoyl-, azidoacridinyl-,  
diazocyclopentadienylcarbonyl- and 8-propyloxypsoralen  
photobiotinylation reagents. Syntheses and  
photoreactions with DNA and protein

AUTHOR(S): Henriksen, Ulla; Buchardt, Ole; Nielsen, Peter E.

CORPORATE SOURCE: H. C. Oersted Inst., Univ. Copenhagen, Copenhagen,  
DK-2100, Den.

SOURCE: Journal of Photochemistry and Photobiology, A:  
Chemistry (1991), 57(1-3), 331-42  
CODEN: JPPCEJ; ISSN: 1010-6030

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 115:67675

AB A series of novel reagents is described for the photobiotinylation of DNA and protein. The reagents consist of a photoactive ligand (photoprobe) tethered to biotin via a polymethylene or azopolymethylene linker. The photoprobes are 4-azidobenzamido, 2-methoxy-6-azido-9-acridinylamino, 2-diazocyclopentadienylcarboxamido, 4-azido-2-nitroaniline and 8-(3-aminopropoxy)psoralen. The reagents were irradiated with long-wavelength UV light in the presence of DNA or protein and the biotinylation was monitored by blotting to nitrocellulose and staining with avidin-alkaline phosphatase conjugate. The highest DNA photolabelling was obtained with reagents containing the 4-azidobenzamido or psoralen ligands with an amino group in the linker. The 4-azidobenzamido reagent also exhibited the highest protein labeling. Some of these new photobiotinylation reagents are superior to existing ones.

IT 134857-17-3P 134857-18-4P 134857-20-8P  
134885-33-9P

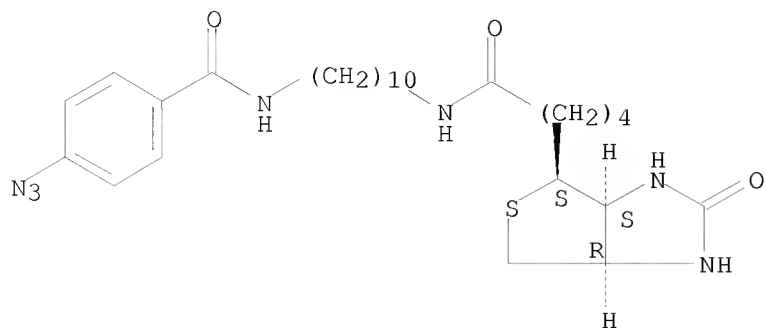
RL: PREP (Preparation)

(preparation of, as photobiotinylation reagent, for DNA and protein)

RN 134857-17-3 CAPLUS

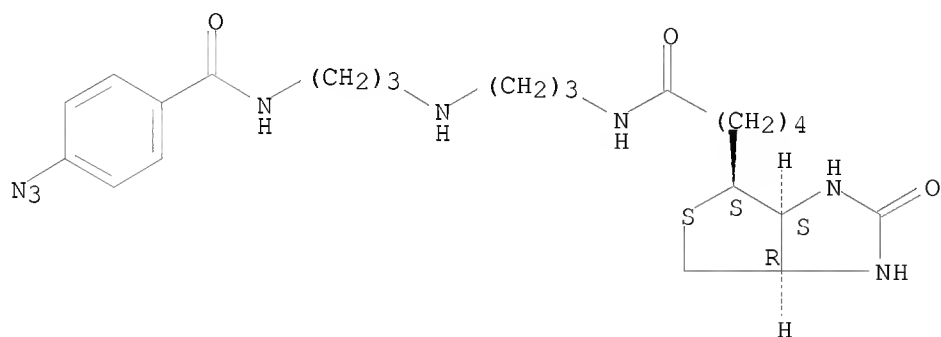
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[10-[(4-azidobenzoyl)amino]decyl]hexahydro-2-oxo-,  
[3aS-(3aα,4β,6aα)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 134857-18-4 CAPLUS  
 CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[3-[[3-[(4-azidobenzoyl)amino]propyl]amino]propyl]hexahydro-2-oxo-,  
 monohydrochloride, [3aS-(3aα,4β,6aα)]- (9CI) (CA INDEX  
 NAME)

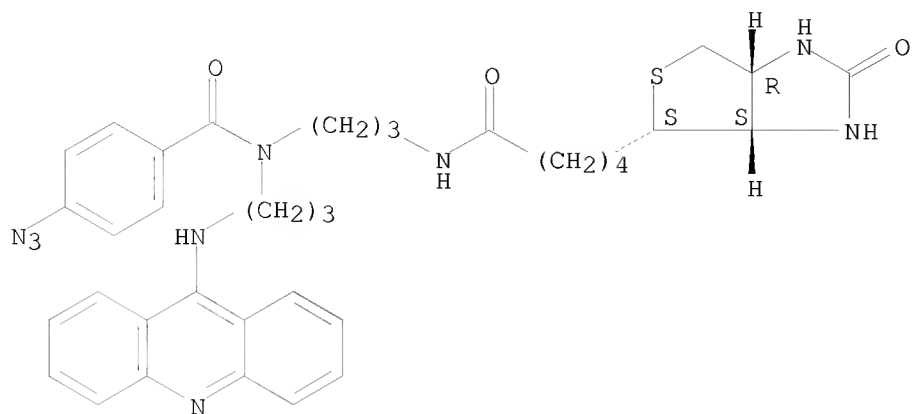
Absolute stereochemistry.



● HCl

RN 134857-20-8 CAPLUS  
 CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[3-[[3-(9-acridinylamino)propyl](4-azidobenzoyl)amino]propyl]hexahydro-2-  
 oxo-, [3aS-(3aα,4β,6aα)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

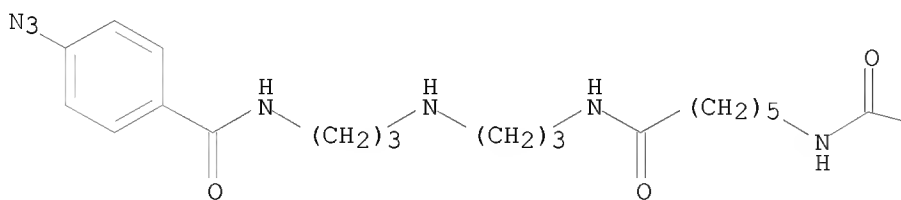


RN 134885-33-9 CAPLUS

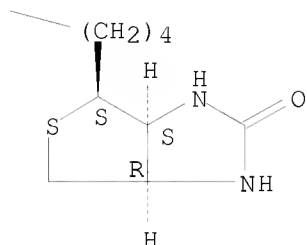
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[6-[[[3-[[[3-[(4-azidobenzoyl)amino]propyl]amino]propyl]amino]-6-oxohexyl]hexahydro-2-oxo-, dihydrochloride,  
[3aS-(3aα, 4β, 6aα)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



● 2 HCl



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

L8 ANSWER 33 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1986:438750 CAPLUS

DOCUMENT NUMBER: 105:38750

ORIGINAL REFERENCE NO.: 105:6365a,6368a

TITLE: Non-radioactive biological probes

INVENTOR(S): Symons, Robert Henry

PATENT ASSIGNEE(S): Biotechnology Research Enterprises S. A. Pty. Ltd.,  
Australia

SOURCE: Eur. Pat. Appl., 58 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

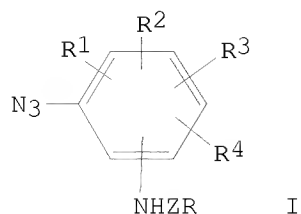
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 155854	A2	19850925	EP 1985-301985	19850322 <--
EP 155854	A3	19860129		
EP 155854	B1	19900926		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AU 8540310	A	19851003	AU 1985-40310	19840322 <--
AU 580042	B2	19881222		
ZA 8502129	A	19851127	ZA 1985-2129	19850321 <--
CA 1249975	A1	19890214	CA 1985-477184	19850321 <--
JP 61000087	A	19860106	JP 1985-57667	19850322 <--
JP 06078289	B	19941005		
US 4898951	A	19900206	US 1988-191811	19880504 <--
PRIORITY APPLN. INFO.:				
			AU 1984-4200	A 19840322
			AU 1984-7500	A 19841004
			US 1985-712705	B1 19850315

OTHER SOURCE(S): MARPAT 105:38750

GI



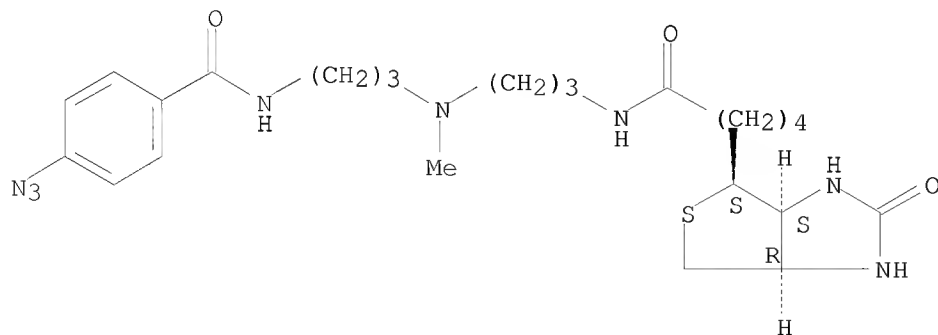
AB Nonradioactive probes of form I (R = ligand, hapten; R1-R4 = H, halogen, C1-5 alkyl, nitro, carboxylic acid, or amino; Z = hydrocarbyl amine containing  $\geq 5$  C; NHZR may or may not be in the para position relative to N3) are synthesized and their use as intermediates in the preparation of nonradioactive biol. probes is described. Preferentially R is a residue which when coupled to a nucleic acid is capable of forming a detectable complex with a protein or other mol. or which enables a labeled polynucleotide to be selectively extracted from unlabeled polynucleotides. Thus photobiotin acetate (prepared in 3 steps from N-(3-aminopropyl)-N-(4-azido-2-nitrophenyl)-N-Me 1,3-propanediamine and d-biotinyl-N-hydroxysuccinimide ester) was added to an equal amount of nucleic acid in water. The solution was sealed inside a glass tube, cooled in an ice-water bath, and irradiated for 15 min. The solution was then added to tris buffer and water and extracted with butanol. The aqueous phase was separated, NaOAc and cold EtOH added and the biotin-labeled nucleic acid precipitated by chilling. A red pellet was obtained by centrifugation; the pellet was washed with EtOH, dried in vacuo, and dissolved in EDTA. Single-stranded M13 DNA probes labeled with 1 biotin/100-400 residues detected as little as 0.5 pg ( $6 + 10^{-18}$  mol) of target DNA in dot-blot hybridization reactions on nitrocellulose using alkaline or acid phosphatase. The detection of target RNA in dot blots and northern blots was equivalent in sensitivity to radioactive methods. Photobiotin acetate can also be used as a protein-labeling reagent.

IT 101637-63-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as nonradioactive biol. probe)

RN 101637-63-2 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[3-[[3-[(4-azidobenzoyl)amino]propyl)methylamino]propyl]hexahydro-2-oxo-  
[3aS-(3a $\alpha$ ,4B,6a $\alpha$ )]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



=> FIL STNGUIDE  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
108.32	685.12

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-9.35	-9.35

CA SUBSCRIBER PRICE

FILE 'STNGUIDE' ENTERED AT 16:05:47 ON 04 OCT 2010  
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT  
COPYRIGHT (C) 2010 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.

LAST RELOADED: Oct 1, 2010 (20101001/UP).

=>

=> d

YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:

YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:d his

YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:y

L8 ANSWER 1 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2004:772456 CAPLUS

DN 142:389159

TI Synthetic probe compounds for the bioorganic studies of nyctinastic  
leaf-movement in leguminous plants

AU Sugimoto, Takanori; Fujii, Tomohiko; Yamamura, Shosuke; Ueda, Minoru

CS Laboratory of Natural Products, Department of Chemistry, Faculty of  
Science and Technology, Keio University, Hiyoshi, Yokohama, 223-8522,  
Japan

SO Trends in Heterocyclic Chemistry (2003), 9, 101-107

CODEN: TIHCE6

PB Research Trends

DT Journal

LA English

OS CASREACT 142:389159

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs hitstr 13-22

YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:y

L8 ANSWER 13 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:506853 CAPLUS

DOCUMENT NUMBER: 127:131981

ORIGINAL REFERENCE NO.: 127:25369a,25372a

TITLE: Compositions and methods for targeting gene delivery  
vehicles using targeting elements covalently bound to  
gene delivery vehicles through linking agents

INVENTOR(S): Moore, Margaret D.; Respass, James G.

PATENT ASSIGNEE(S): Chiron Viagene, Inc., USA

SOURCE: PCT Int. Appl., 45 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

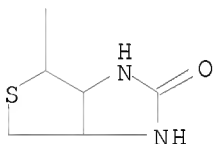
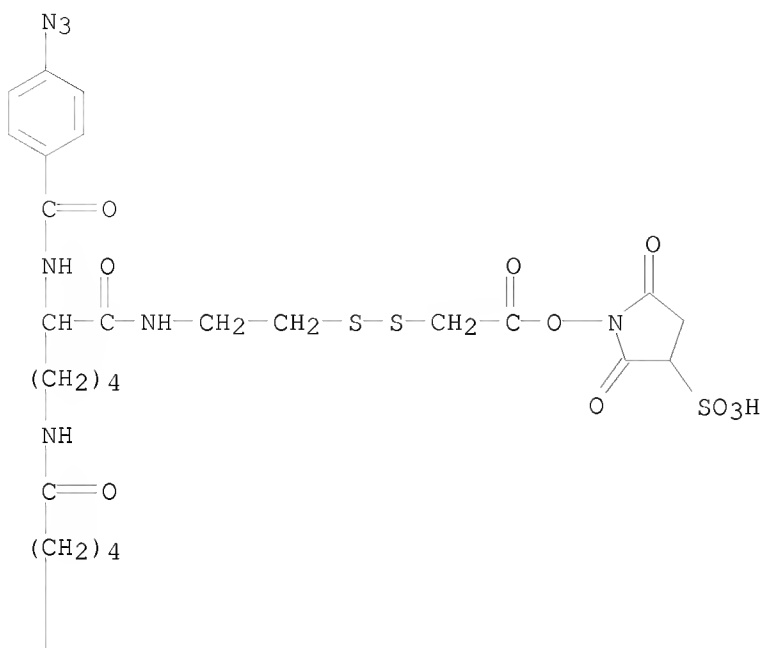
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9723608	A1	19970703	WO 1996-US20543	19961218 <--
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
PRIORITY APPLN. INFO.:			US 1995-577282	A 19951222
			US 1996-767454	A 19961216

AB The invention described herein relates to compns. and methods for targeting gene delivery vehicles. Specifically, the invention relates to utilizing multifunctional linking agents, i.e., homo-bifunctional, heterobifunctional, and trifunctional linking agents, to covalently bind targeting elements to the exterior of gene delivery vehicles. Following administration of such targeted gene delivery vehicles to an animal, the targeted elements interact with a specific mol. on the surface of the target cells, after which the desired nucleic acid mol. is introduced into the target cell and expressed. The described targeting mechanism allows gene delivery vehicles to be delivered to specific target cell or tissue types with greater specificity than occurs when the gene delivery vehicle administered lacks such a covalently bound targeting element. In an example, 4(4-N-maleimidophenyl)butyric acid hydride ·HCl·1/2 dioxane (MPBH) is a heterobifunctional non-cleavable linking agent containing a hydrazide group and maleimide that react with carbohydrates and sulfhydryls, resp. Animal cells lines were used in assays using β-galactosidase gene expression and histochem. staining to demonstrate uptake of gene delivery vehicles. Gene delivery vehicles were also injected into human and non-human animals. Patients preferably receive doses of 10<sup>6</sup>-10<sup>11</sup> targeted gene delivery vehicles I.V., intra-arterially, in the local vasculature or peritumorally, in a volume of 0.1-3 mL.

IT 163657-86-1  
 RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)  
 (linking agent; compns. and methods for targeting gene delivery vehicles using targeting elements covalently bound to gene delivery vehicles through linking agents)

RN 163657-86-1 CAPLUS

CN Acetic acid, 2-[[2-[[2-[(4-azidobenzoyl)amino]-6-[[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-3-sulfo-1-pyrrolidinyl ester (CA INDEX NAME)



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 14 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:412440 CAPLUS

DOCUMENT NUMBER: 127:66182

ORIGINAL REFERENCE NO.: 127:12659a

TITLE: An efficient three dimensional orthogonal strategy for solid-phase synthesis of a bifunctional peptide

AUTHOR(S): Lelievre, Dominique; Daguet, David; Piller, Friedrich; Piller, Veronique; Vassard, Cecile; Brack, Andr

CORPORATE SOURCE: Centre de Biophysique Moleculaire, Orleans, 45071, Fr.

SOURCE: Innovation and Perspectives in Solid Phase Synthesis & Combinatorial Libraries: Peptides, Proteins and Nucleic Acids--Small Molecule Organic Chemical Diversity, Collected Papers, International Symposium, 4th, Edinburgh, Sept. 12-16, 1995 (1996), Meeting Date 1995, 459-460. Editor(s): Epton, Roger. Mayflower Scientific: Birmingham, UK.

CODEN: 64ONA9

DOCUMENT TYPE: Conference

LANGUAGE: English



AB A symposium report on the preparation of bifunctional peptide  
 Biotin-(Thr-Ser-Pro)4-Lys(ASA)-Gly-OH (I; ASA = 4-azidosalicylic acid) by  
 solid-phase methods with a 3-dimensional orthogonal strategy using  
 9-fluorenylmethoxycarbonyl (Fmoc) as N $\alpha$ -transient protection and the  
 new protecting group 1-(4,4-dimethyl-2,6-dioxocyclohex-1-ylidene)ethyl  
 (Dde) as a temporary protecting group for N $\epsilon$ -lysine. I is a tool  
 to identify the active site of GalNAc transferase.

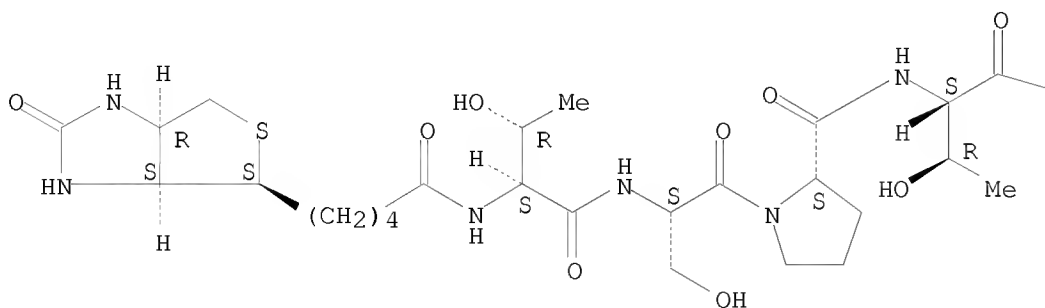
IT 174138-09-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (efficient 3-dimensional orthogonal strategy for solid-phase synthesis  
 of a biotin-containing bifunctional peptide)

RN 174138-09-1 CAPLUS

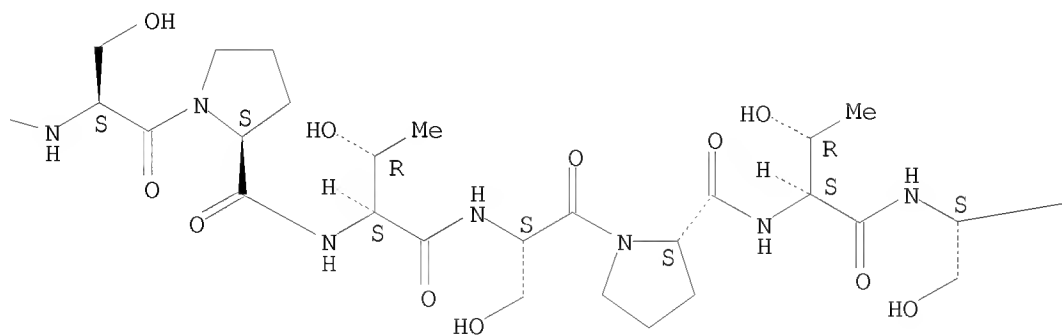
CN Glycine, N-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-  
 L-threonyl-L-seryl-L-prolyl-L-threonyl-L-seryl-L-prolyl-L-threonyl-L-seryl-  
 L-prolyl-L-threonyl-L-seryl-L-prolyl-N6-(4-azido-2-hydroxybenzoyl)-L-lysyl-  
 , [3aS-(3 $\alpha\alpha$ ,4 $\beta$ ,6 $\alpha\alpha$ )]- (9CI) (CA INDEX NAME)

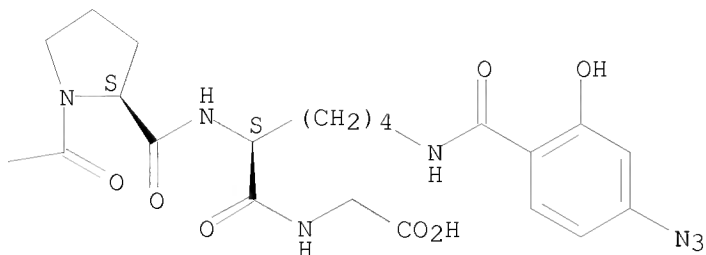
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B





L8 ANSWER 15 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1997:374799 CAPLUS

DOCUMENT NUMBER: 126:340473

ORIGINAL REFERENCE NO.: 126:66131a,66134a

TITLE: CD23 processing enzyme from human B-cells

INVENTOR(S): Buckle, Derek Richard; Christie, Gary; Marolewski, Ariane Elizabeth; Mayer, Ruth Judik; Smith, David Glynn

PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA; Buckle, Derek Richard; Christie, Gary; Marolewski, Ariane Elizabeth; Mayer, Ruth Judik; Smith, David Glynn

SOURCE: PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9713848	A1	19970417	WO 1996-US16416	19961010 <--
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 854915	A1	19980729	EP 1996-936453	19961010 <--
EP 854915	B1	20050511		
R: BE, CH, ES, FR, GB, IT, LI, NL				
JP 2000500324	T	20000118	JP 1997-515275	19961010 <--
ES 2241006	T3	20051016	ES 1996-936453	19961010
US 6232089	B1	20010515	US 1998-51529	19980821 <--

PRIORITY APPLN. INFO.:

US 1995-5316P P 19951010

US 1996-13427P P 19960314

WO 1996-US16416 W 19961010

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A novel CD23-processing enzyme (I) is provided which is of importance in the human immune response and regulation of IgE production, and is expressed on the surface of a variety of cells. I was detected in RPMI8866 cells, a human Epstein-Barr virus-transformed B-cell, and purified after detergent solubilization by chromatog. on heparin-agarose, Q-Sepharose, Mono S, gel filtration, and metal and dye affinity chromatog. The enzyme cleaves CD23 (the low affinity IgE receptor, FcεRII) into fragments of apparent mol. weight 37 and 33 kDa. It is inhibited by [4-(N-hydroxyamino)-2-(R)-isobutyl-3-(S)-(2-thiophenethiomethyl)-succinyl]-(S)-phenylalanine-N-methylamine and 1,10-phenanthroline, and has a pH optimum in the range 7.5-9.0. I can be used to identify inhibitors of CD23 processing. Several photolabeling compds. were synthesized.

IT 189754-46-9P

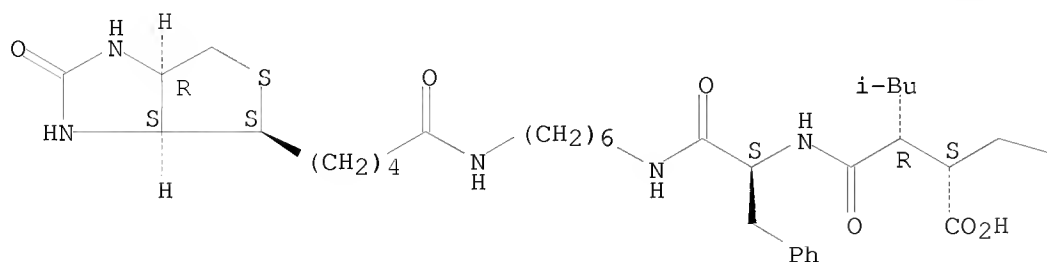
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(syntheses of photolabeling and affinity reagents; CD23 processing  
enzyme from human B-cells)

RN 189754-46-9 CAPLUS

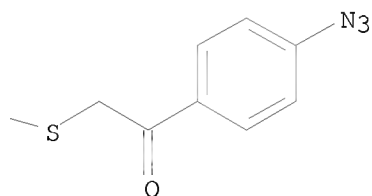
CN Hexanoic acid, 2-[[[2-(4-azidophenyl)-2-oxoethyl]thio]methyl]-3-[[[(1S)-2-  
[[6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-  
oxopentyl]amino]hexyl]amino]-2-oxo-1-(phenylmethyl)ethyl]amino]carbonyl]-5-  
methyl-, (2S,3R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



IT 189754-50-5P

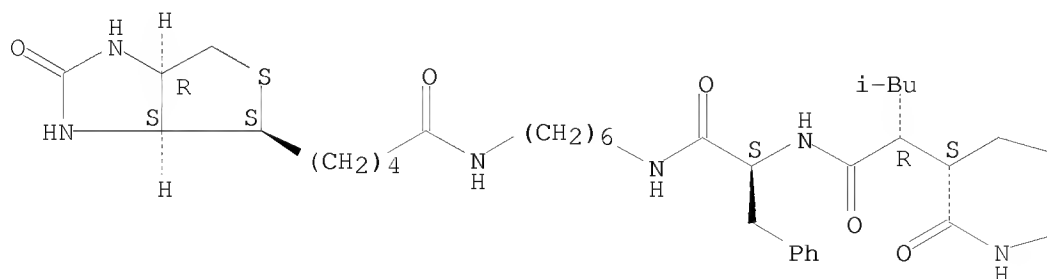
RL: SPN (Synthetic preparation); PREP (Preparation)  
(syntheses of photolabeling and affinity reagents; CD23 processing  
enzyme from human B-cells)

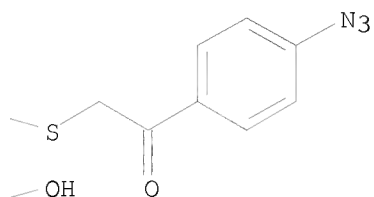
RN 189754-50-5 CAPLUS

CN Butanediamide, 2-[[[2-(4-azidophenyl)-2-oxoethyl]thio]methyl]-N4-[(1S)-2-  
[[6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-  
oxopentyl]amino]hexyl]amino]-2-oxo-1-(phenylmethyl)ethyl]-N1-hydroxy-3-(2-  
methylpropyl)-, (2S,3R)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)  
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 16 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:685906 CAPLUS

DOCUMENT NUMBER: 126:137496

ORIGINAL REFERENCE NO.: 126:26459a,26462a

TITLE: Absorption spectra and photochemical characteristics  
of new photobiotin

AUTHOR(S): Blinova, K. G.; Yuzhakov, V. I.; Shcherbo, S. N.;  
Turchinskii, M. F.

CORPORATE SOURCE: Mosk. Gos. Univ., Moscow, Russia

SOURCE: Vestnik Moskovskogo Universiteta, Seriya 3: Fizika,  
Astronomiya (1996), (3), 45-49  
CODEN: VMUFAO; ISSN: 0579-9392

PUBLISHER: Izdatel'stvo Moskovskogo Universiteta

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB A new photobiotin was synthesized from di(3-aminopropyl)methylamine and  
 $\epsilon$ -amidocaproylbiotin and 4-azidosalicylic acid. Dynamics of  
optical absorption of aqueous solution of this compound was studied as a  
function  
of pH and irradiation dose.

IT 186420-70-2P

RL: PNU (Preparation, unclassified); RCT (Reactant); PREP (Preparation);  
RACT (Reactant or reagent)

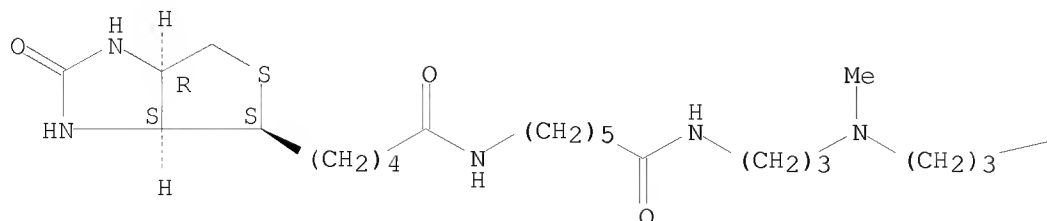
(absorption spectra and photochem. characteristics of photobiotin  
synthesized from di(3-aminopropyl)methylamine and  
 $\epsilon$ -amidocaproylbiotin and 4-azidosalicylic acid)

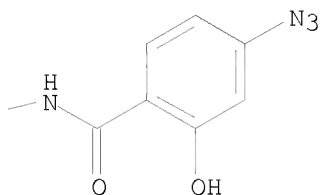
RN 186420-70-2 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,

N-[6-[[3-[[3-[(4-azido-2-hydroxybenzoyl)amino]propyl]methylamino]propyl]am  
ino]-6-oxohexyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.





L8 ANSWER 17 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:452802 CAPLUS

DOCUMENT NUMBER: 125:142464

ORIGINAL REFERENCE NO.: 125:26661a, 26664a

TITLE: preparation of biotin-containing heterobifunctional cleavable compounds as crosslinking agents for trypsin

INVENTOR(S): Fujimoto, Edward K.

PATENT ASSIGNEE(S): Pierce Chemical Co., USA

SOURCE: U.S., 5 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

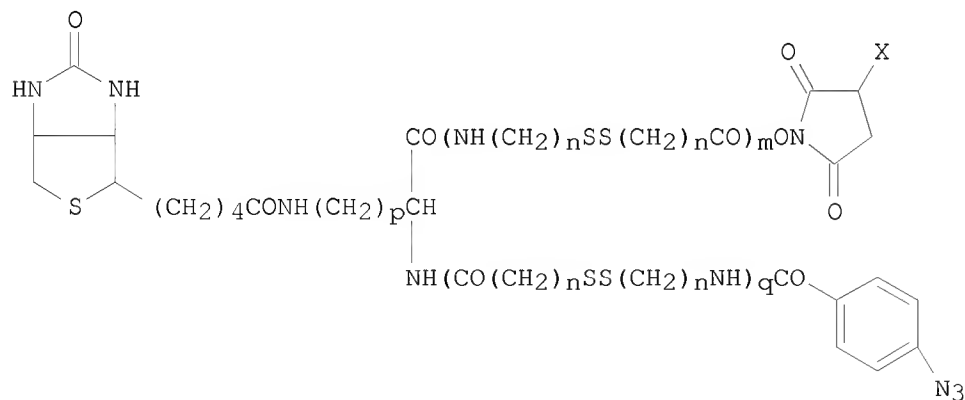
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5532379	A	19960702	US 1995-435206	19950505 <--
PRIORITY APPLN. INFO.:			US 1995-435206	19950505
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT				
OTHER SOURCE(S): CASREACT 125:142464; MARPAT 125:142464				

GI



I

AB Trifunctional crosslinking compds. I ( $m, q = 0, 1$ ;  $X = H, SO_3Na$ ;  $n, p = 1-10$ ) are disclosed. The compds. contain the biotin moiety, the NHS active ester, and a photoactivatable aryl azide. The presence of a

disulfide bond in association with either the ester or azide permits the compound to be cleaved. Thus, succinimidoyl 2-(4-azidobenzamido)-6-(biotinamido)hexanoate (preparation given) was reacted with 2-aminoethyl 2'-carboxyethyl disulfide and the product reacted with 3-sulfo-N-hydroxysuccinimide to give I (m = 1; q = 0; X = SO<sub>3</sub>Na; n = 2; p = 4). This conjugated readily with trypsin by incubating for 3.5 min. at room temperature followed by photolysis with a long wave UV lamp.

IT 1231898-47-7 1231898-48-8

RL: PRPH (Prophetic)

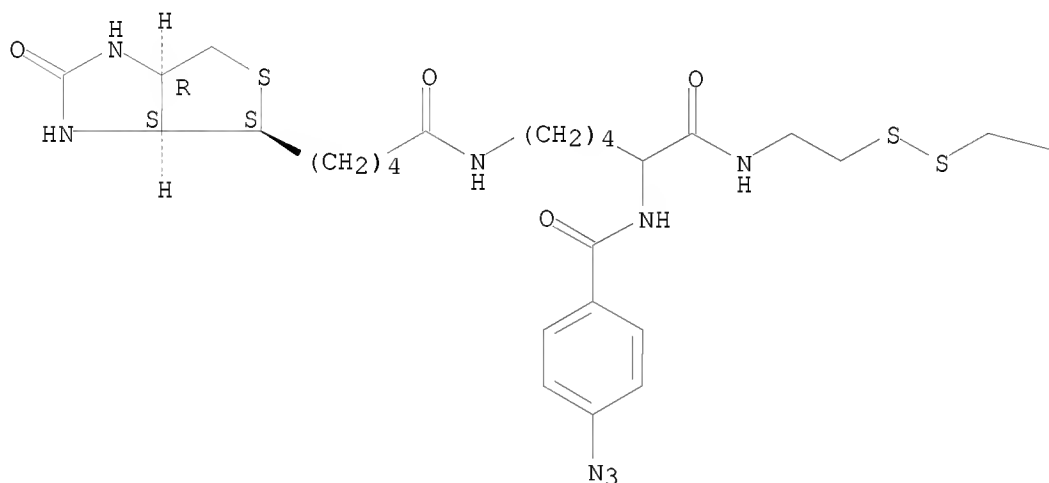
(preparation of biotin-containing heterobifunctional cleavable compounds as crosslinking agents for trypsin)

RN 1231898-47-7 CAPLUS

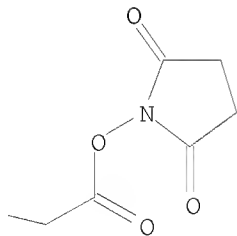
CN Propanoic acid, 3-[[2-[[2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-1-pyrrolidinyl ester (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RN 1231898-48-8 CAPLUS

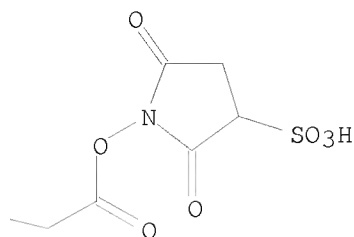
CN Propanoic acid, 3-[[2-[[2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]- (CA INDEX NAME)

Chemical structure of compound 1, a thiol-terminated peptide derivative. The structure shows a thiol group (HO<sub>2</sub>C-CH<sub>2</sub>-CH<sub>2</sub>-S-) linked to a peptide backbone. The peptide backbone consists of a thiazolidine ring substituted with a thioether-linked chain: -(CH<sub>2</sub>)<sub>4</sub>-C(=O)-NH-(CH<sub>2</sub>)<sub>4</sub>-NH-C(=O)-CH<sub>2</sub>-NH-C(=O)-C<sub>6</sub>H<sub>4</sub>-N<sub>3</sub>. The thiazolidine ring is also substituted with an R group and a hydrogen atom.

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

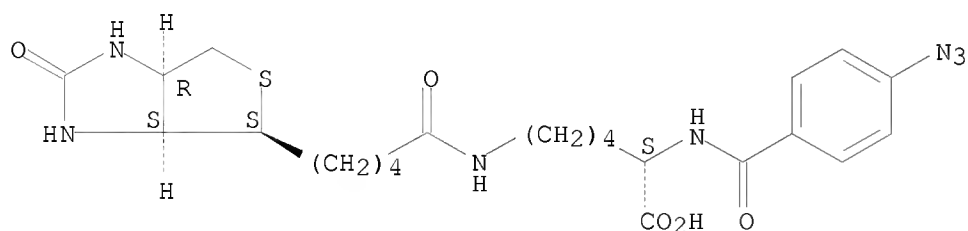
RN 179763-59-8 CAPLUS

Absolute stereochemistry.



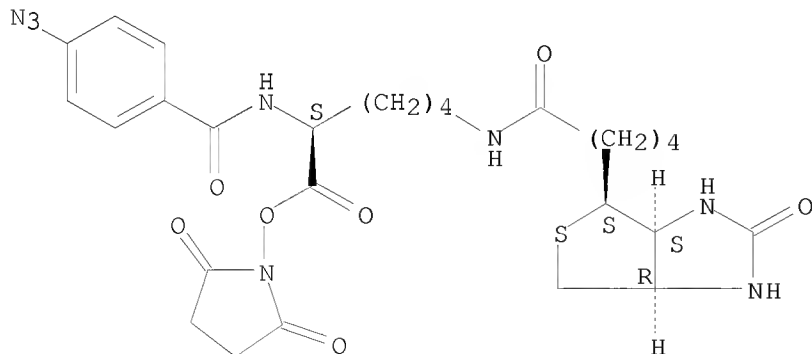
IT 135442-12-5P 143304-60-3P 179763-58-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (preparation of biotin-containing heterobifunctional cleavable compds. as  
 crosslinking agents for trypsin)  
 RN 135442-12-5 CAPLUS  
 CN L-Lysine, N2-(4-azidobenzoyl)-N6-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]-  
 imidazol-4-yl)-1-oxopentyl]-, [3aS-(3α,4β,6α)]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.



RN 143304-60-3 CAPLUS  
 CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[5-[(4-azidobenzoyl)amino]-6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-  
 oxohexyl]hexahydro-2-oxo-, [3aS-[3α,4β(R\*),6α]]- (9CI)  
 (CA INDEX NAME)

Absolute stereochemistry.

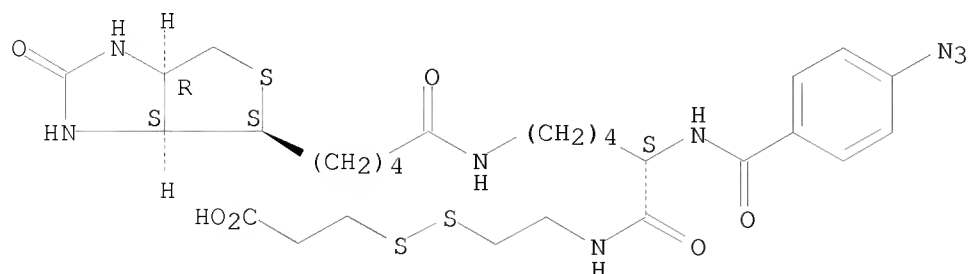


RN 179763-58-7 CAPLUS  
 CN Propanoic acid, 3-[[2-[[2-[(4-azidobenzoyl)amino]-6-[[5-(hexahydro-2-oxo-  
 1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-1-



oxohexyl]amino]ethyl]dithio]-, [3aS-[3α, 4β(R\*), 6α]]-  
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L8 ANSWER 18 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:5408 CAPLUS

DOCUMENT NUMBER: 124:203031

ORIGINAL REFERENCE NO.: 124:37557a,37560a

TITLE: Online solid-phase synthesis of a peptide  
bi-derivatized with biotin and 4-azidosalicylic acid

AUTHOR(S): Lelievre, Dominique; Daguet, David; Brack, Andre

CORPORATE SOURCE: Centre Biophysique Molculaire, Orleans, 45071, Fr.

SOURCE: Tetrahedron Letters (1995), 36(51), 9317-20

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The peptide (TSP)4 is an efficient substrate for GalNAc transferase. To  
localize the active site of GalNAc transferase, Biotin-(TSP)4-Lys(ASA)-G  
was prepared by online solid phase synthesis using Fmoc strategy. The new  
protecting group, 1-(4,4-dimethyl-2,6-dioxocyclohex-1-ylidene)ethyl (Dde)  
was used as a temporary protecting group for lysine N. The bi-derivatized  
peptide was characterized by mass spectrometry and FTIR spectrometry.  
This strategy can be generalized to other bi-derivatized peptides  
synthesized for ligand-receptor studies.

IT 174138-09-1P

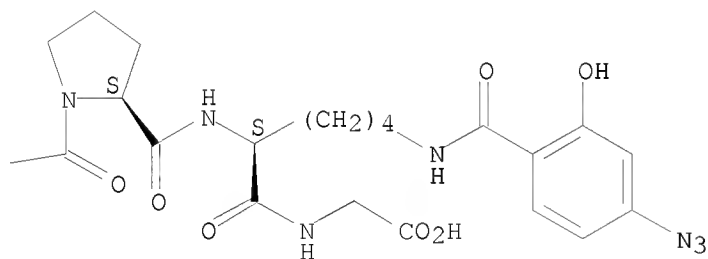
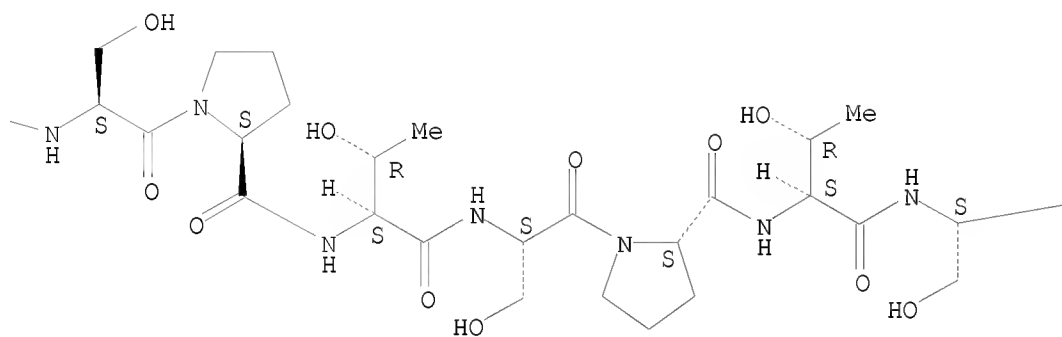
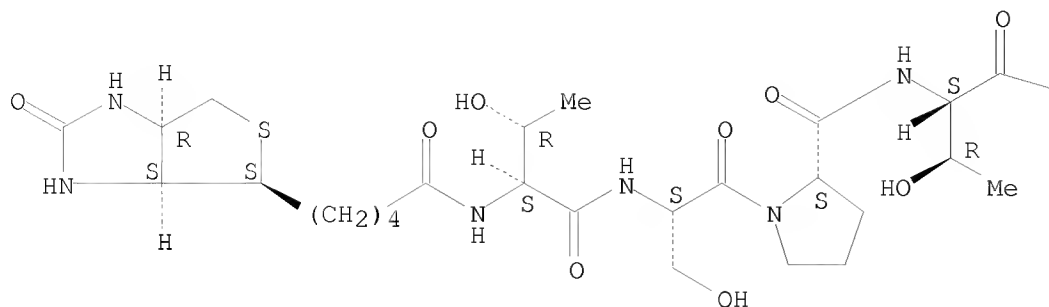
RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); SPN (Synthetic preparation); BIOL (Biological  
study); PREP (Preparation)

(solid-phase synthesis of a peptide bi-derivatized with biotin and  
4-azidosalicylic acid)

RN 174138-09-1 CAPLUS

CN Glycine, N-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-  
L-threonyl-L-seryl-L-prolyl-L-threonyl-L-seryl-L-prolyl-L-threonyl-L-seryl-  
L-prolyl-L-threonyl-L-seryl-L-prolyl-N6-(4-azido-2-hydroxybenzoyl)-L-lysyl-  
, [3aS-(3α, 4β, 6α)]- (9CI) (CA INDEX NAME)

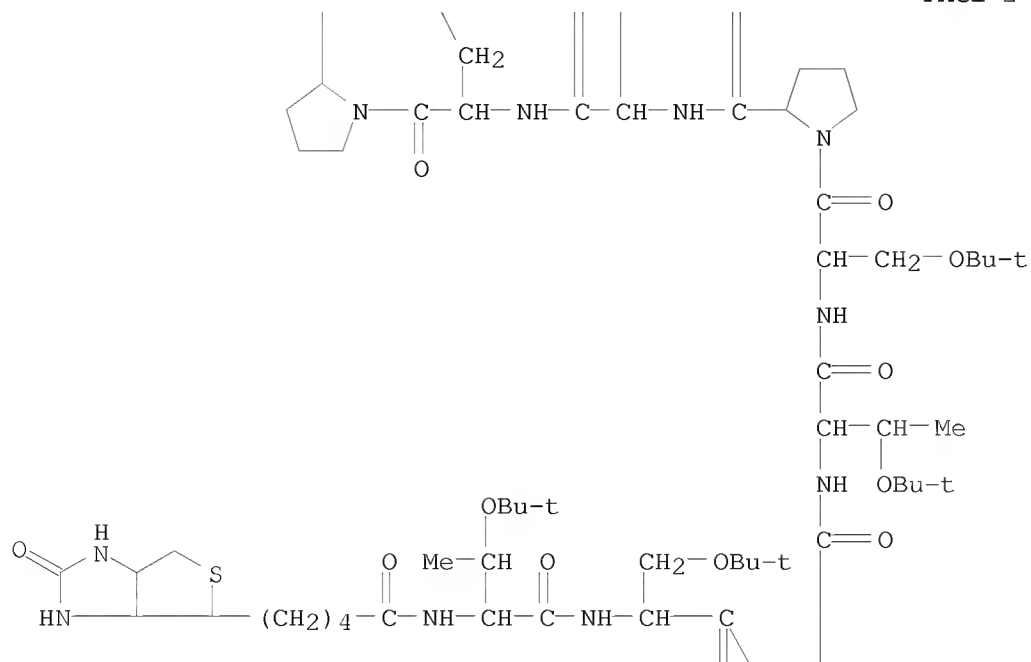
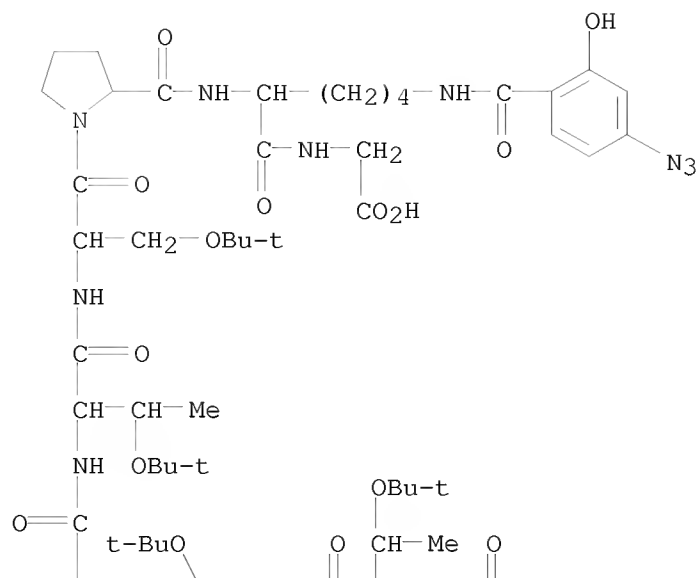
Absolute stereochemistry.

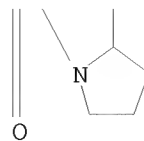


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IT      174138-08-0DP, polymer-bound
      RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
      (Reactant or reagent)
      (solid-phase synthesis of a peptide bi-derivatized with biotin and
      4-azidosalicylic acid)
RN      174138-08-0  CAPLUS
CN      Glycine, O-(1,1-dimethylethyl)-N-[5-(hexahydro-2-oxo-1H-thieno[3,4-
      d]imidazol-4-yl)-1-oxopentyl]-L-threonyl-O-(1,1-dimethylethyl)-L-seryl-L-
      prolyl-O-(1,1-dimethylethyl)-L-threonyl-O-(1,1-dimethylethyl)-L-seryl-L-
      prolyl-O-(1,1-dimethylethyl)-L-threonyl-O-(1,1-dimethylethyl)-L-seryl-L-
      prolyl-O-(1,1-dimethylethyl)-L-threonyl-O-(1,1-dimethylethyl)-L-seryl-L-
      prolyl-N6-(4-azido-2-hydroxybenzoyl)-L-lysyl-,
      [3aS-(3aα,4β,6aα)]- (9CI) (CA INDEX NAME)

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OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

L8 ANSWER 19 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1995:828611 CAPLUS

DOCUMENT NUMBER: 123:222328

ORIGINAL REFERENCE NO.: 123:39503a,39506a

TITLE: Interference-reducing agents for use in immunoassays

INVENTOR(S): Kientsch-Engel, Rosemarie; Donie, Frederic; Wiedmann, Michael

PATENT ASSIGNEE(S): Boehringer Mannheim G.m.b.H., Germany

SOURCE: Ger. Offen., 12 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4407423	A1	19950907	DE 1994-4407423	19940305 <--
WO 9523800	A1	19950908	WO 1995-EP690	19950225 <--
W: CA, CN, FI, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 697021	A1	19960221	EP 1995-909783	19950225 <--
EP 697021	B1	20000705		
R: AT, BE, DE, DK, ES, FR, GB, GR, IE, IT, NL, PT				
JP 08508301	T	19960903	JP 1995-522680	19950225 <--
JP 2750003	B2	19980513		
AT 194349	T	20000715	AT 1995-909783	19950225 <--
CA 2184386	A1	19950908	CA 1995-2184386	19950303 <--
CA 2184386	C	20051018		
WO 9523801	A1	19950908	WO 1995-EP776	19950303 <--
W: CA, CN, FI, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 749435	A1	19961227	EP 1995-912194	19950303 <--
EP 749435	B1	20001011		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, PT, SE				
CN 1143368	A	19970219	CN 1995-191975	19950303 <--
CN 1102594	C	20030305		
JP 09510289	T	19971014	JP 1995-522705	19950303 <--
JP 3027770	B2	20000404		
AT 196906	T	20001015	AT 1995-912194	19950303 <--
ES 2152392	T3	20010201	ES 1995-912194	19950303 <--
PT 749435	E	20010330	PT 1995-912194	19950303 <--
FI 9603461	A	19960904	FI 1996-3461	19960904 <--
FI 114341	B1	20040930		
US 5863740	A	19990126	US 1996-700435	19960905 <--
US 5952185	A	19990914	US 1997-958870	19971027 <--
PRIORITY APPLN. INFO.:				
			DE 1994-4407423	A 19940305
			WO 1995-EP690	W 19950225
			WO 1995-EP776	W 19950303
			US 1995-535072	B1 19951103

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The finding concerns interference-reducing agents for avoiding nonspecific reactions in immunoassays wherein the agents used are avidin or streptavidin or their derivs. Interferences in heterogeneous immunoassays can decrease sensitivity and specificity and even cause false-pos. anal. results especially in the determination of antibodies. The agents can be used for improving immunoassays of, e.g., haptens, antigens, or antibodies in, e.g., body fluids. Examples are given of the preparation of, e.g., crosslinked streptavidin after activation by various crosslinking agents, of bovine serum albumin-streptavidin conjugates, etc.

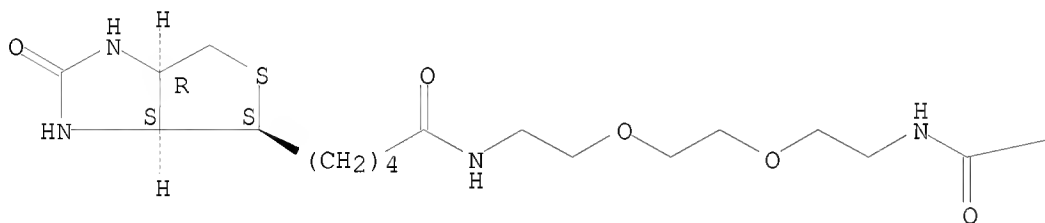
IT 168411-59-4DP, streptavidin conjugates  
 RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)  
 (interference-reducing agents for use in immunoassays)

RN 168411-59-4 CAPLUS

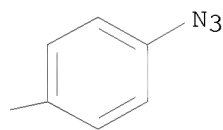
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
 N-[2-[2-[2-[(4-azidobenzoyl)amino]ethoxy]ethoxy]ethyl]hexahydro-2-oxo-,  
 [3aS-(3a $\alpha$ ,4 $\beta$ ,6a $\alpha$ )]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L8 ANSWER 20 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1995:699341 CAPLUS

DOCUMENT NUMBER: 123:106175

ORIGINAL REFERENCE NO.: 123:18783a,18786a

TITLE: Modular Design of Biotinylated Photoaffinity Probes: Synthesis and Utilization of a Biotinylated Pepstatin Photoprobe

AUTHOR(S): Gilbert, Bryant A.; Rando, Robert R.

CORPORATE SOURCE: Department of Biological Chemistry and Molecular Pharmacology, Harvard Medical School, Boston, MA, 02115, USA

SOURCE: Journal of the American Chemical Society (1995), 117(31), 8061-6

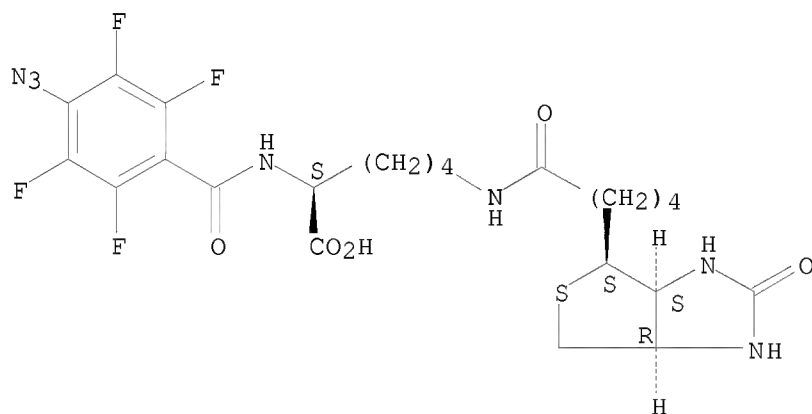
CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 123:106175  
 AB A novel modular design is presented for the introduction of biotinylated photoprobes containing either 4-azidotetrafluorobenzamide, 4-(1-azi-2,2,2-trifluoroethyl)benzamide, or 4-benzoylbenzoylamide. The use of biotinylated affinity labels offers several advantages over radiolabeled probes by virtue of their exploitation of the biotin-avidin system of detection and purification. A biotinylated benzoylbenzoyl photoprobe of pepstatin (BBB-pepstatin, 5) was synthesized in three steps from pepstatin. The photoprobe is a competitive inhibitor of porcine pepsin, with an apparent dissociation constant of 31 pM. Western blotting of BBB-pepstatin-photolabeled porcine pepsin, renin, cathepsin D and human renin, and cathepsin D could be detected with an avidin-horseradish peroxidase label. Routinely, 7 pM of aspartic protease could be photolabeled and detected with this system. The pepstatin photoaffinity probe is also very selective; the probe failed to label cysteine protease (papain), metalloprotease (carboxypeptidase A), and serine protease (chymotrypsin and trypsin). To further establish the utility of the biotinylated probe, BBB-pepstatin-photolabeled porcine pepsin was purified by monomeric avidin chromatog. This probe should be useful for the identification of unknown cytosolic and membrane-bound aspartic proteases.  
 IT 165898-22-6  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (modular design of biotinylated photoaffinity probes - synthesis and utilization of a biotinylated pepstatin photoprobe)  
 RN 165898-22-6 CAPLUS  
 CN L-Lysine, N2-(4-azido-2,3,5,6-tetrafluorobenzoyl)-N6-[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 27 THERE ARE 27 CAPLUS RECORDS THAT CITE THIS RECORD (28 CITINGS)

L8 ANSWER 21 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1995:666972 CAPLUS  
 DOCUMENT NUMBER: 123:78846  
 ORIGINAL REFERENCE NO.: 123:13947a,13950a  
 TITLE: Quantitation of Triple-Helix Formation Using a Photo-Crosslinkable Aryl Azide/Biotin/Oligonucleotide Conjugate  
 AUTHOR(S): Geselowitz, Daniel A.; Neumann, Ronald D.  
 CORPORATE SOURCE: Clinical Center, National Institutes of Health, Bethesda, MD, 20892-1180, USA

SOURCE: Bioconjugate Chemistry (1995), 6(4), 502-6  
 CODEN: BCCHE5; ISSN: 1043-1802  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB DNA triple-helix formation has potential applications in gene mapping and as the basis of "antigene" pharmaceuticals; however, the methods for quantitation of triple-helix formation are limited, especially for purine(purine-pyrimidine)-based triplexes. The authors present a novel method for detection and quantitation of triple-helix formation by triple-helix-forming oligonucleotides. The oligonucleotide is conjugated to a photoactivatable crosslinker, sulfosuccinimidyl 3-[2-[6-(biotinamido)-2-(p-azidobenzamido)hexanamido]ethyl]dithiopropionate. After incubation with the target DNA, exposure to light labels the target with biotin. The labeled target can be quantified by a chemiluminescent assay. A 26-mer oligonucleotide previously reported to form a purine(purine-pyrimidine) triplex with the upstream region of the c-myc gene was studied and found to bind to its target with Kd of approx. 100 nM at 37°, 10 mM MgCl2, pH 7.5, consistent with previous reports. This new technique can be used under a variety of conditions and in kinetic expts. and may be extendible to use in living cells.

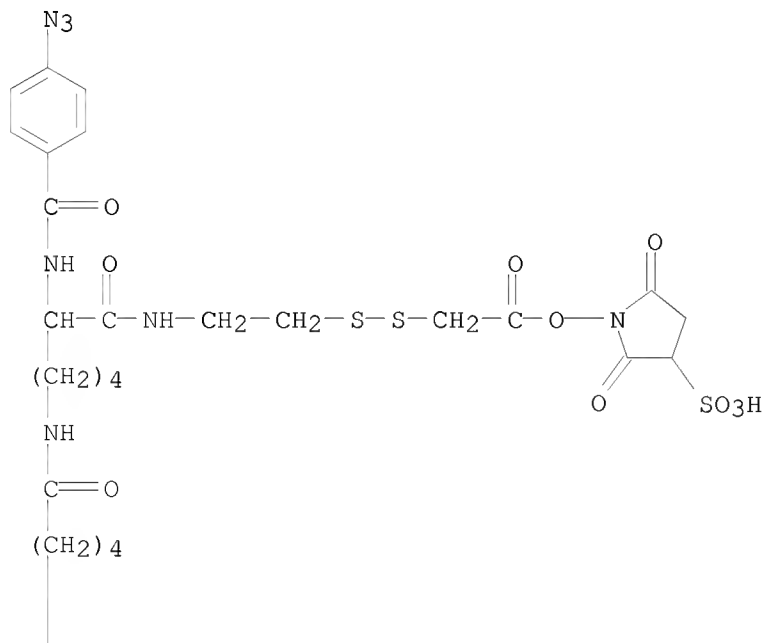
IT 163657-86-1

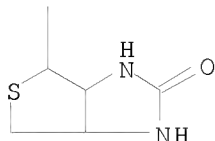
RL: RCT (Reactant); RACT (Reactant or reagent)  
 (determination of triple-helix formation using photo-crosslinkable aryl azide/biotin/oligonucleotide conjugate)

RN 163657-86-1 CAPLUS

CN Acetic acid, 2-[[2-[[2-[(4-azidobenzoyl)amino]-6-[[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-3-sulfo-1-pyrrolidinyl ester (CA INDEX NAME)

PAGE 1-A





OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)

L8 ANSWER 22 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1995:652467 CAPLUS

DOCUMENT NUMBER: 123:51296

ORIGINAL REFERENCE NO.: 123:9127a,9130a

TITLE: Method for provoking immunity by peptides labeled with a photoactivatable group which binds to MHC molecules  
INVENTOR(S): Romero, Pedro; Cerottini, Jean-Charles; Leuscher, Immanuel

PATENT ASSIGNEE(S): Ludwig Institute for Cancer Research, USA

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9509642	A1	19950413	WO 1994-US10897	19940927 <--
W: AU, CA, FI, JP, NO, NZ				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9479589	A	19950501	AU 1994-79589	19940927 <--
PRIORITY APPLN. INFO.:			US 1993-133407	A 19931005
			US 1994-204014	A 19940224
			WO 1994-US10897	W 19940927

AB The invention involves the crosslinking of presented peptides to their corresponding MHC mol. or a soluble MHC derivative which has similar antigen binding properties, to form covalent complexes of the two mols. The resulting materials are useful in provoking an immune response, as well as in the identification of cytolytic T lymphocytes specific for the peptide of interest. The peptides are crosslinked to their partner mol. via a photoactivatable material which is attached to the peptide. Upon exposure to light at an appropriate frequency, the peptide cross-links to the MHC mol. The photoactivatable group is e.g. iodo-4-azidosalicylic acid.

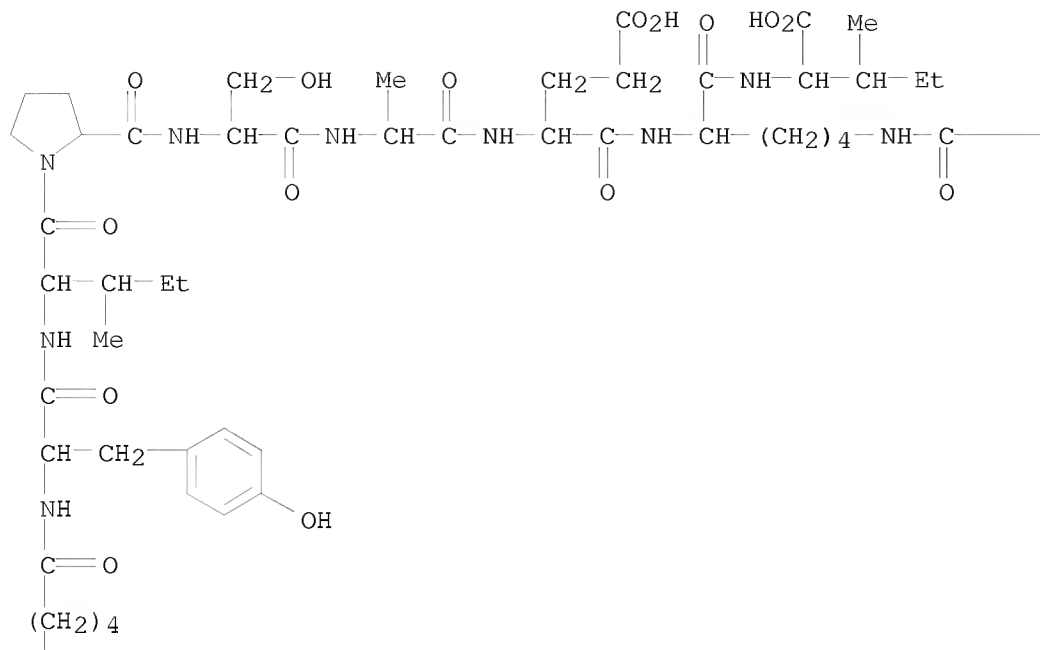
IT 147557-16-2 147794-89-6 149235-89-2  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)  
(immunostimulation with peptides labeled with a photoactivatable group which binds to MHC mols.)

RN 147557-16-2 CAPLUS

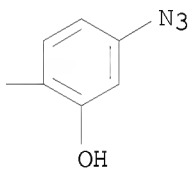
CN L-Isoleucine, N-[N6-(4-azido-2-hydroxyiodobenzoyl)-N2-[N-[N-[1-[N-[N-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-seryl]-L-alanyl]-L- $\alpha$ -glutamyl]-L-lysyl]-, [3aS-(3a $\alpha$ ,4 $\beta$ ,6a $\alpha$ )]- (9CI) (CA INDEX NAME)



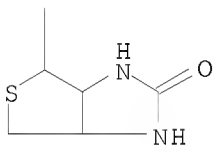
PAGE 1-A



PAGE 1-B

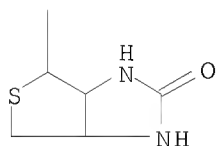
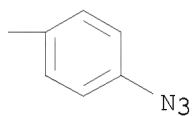
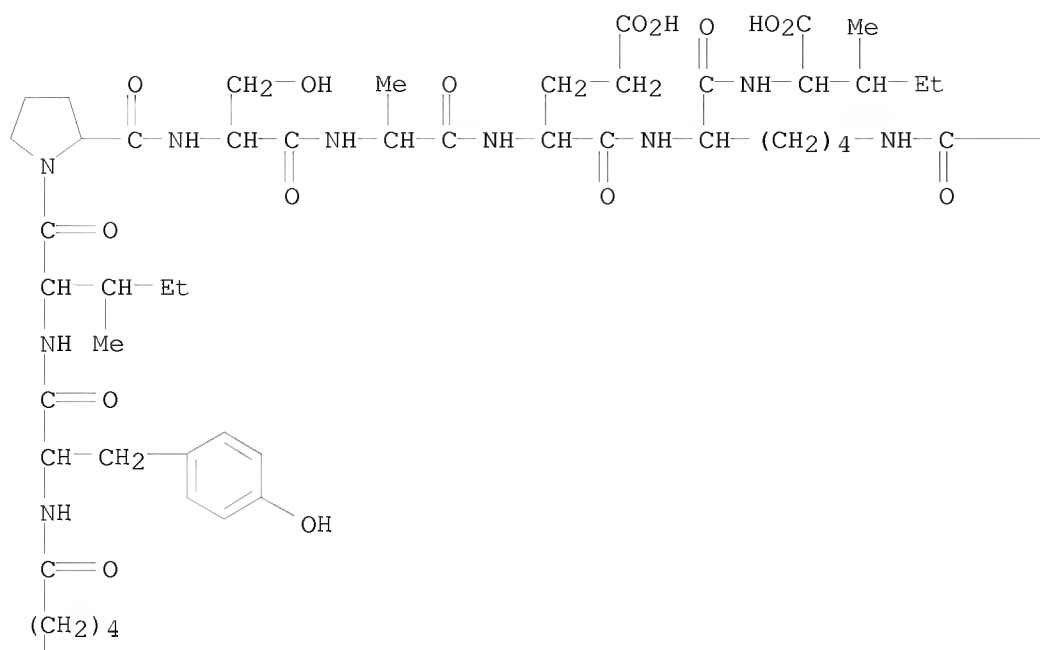


PAGE 2-A



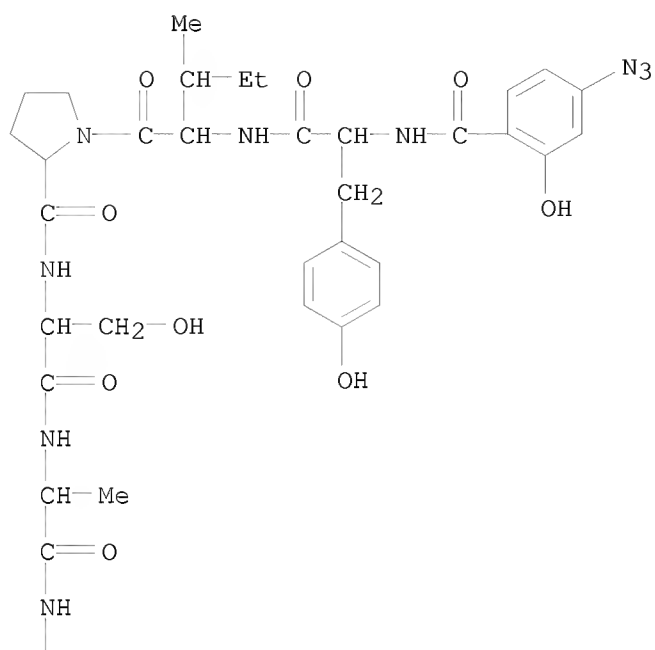
D1- I

RN 147794-89-6 CAPLUS  
 CN L-Isoleucine, N-[N6-(4-azidobenzoyl)-N2-[N-[N-[N-[1-[N-[N-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-seryl]-L-alanyl]-L- $\alpha$ -glutamyl]-L-lysyl]-, [3aS-(3a $\alpha$ , 4 $\beta$ , 6a $\alpha$ )]- (9CI) (CA INDEX NAME)

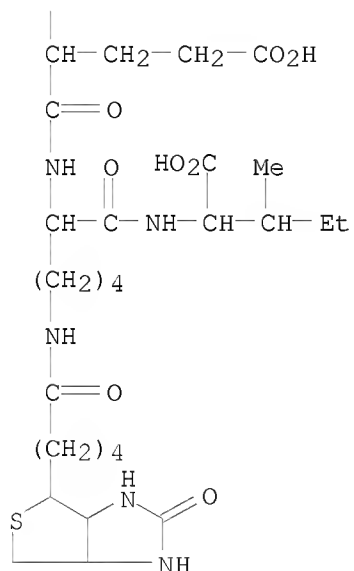


RN 149235-89-2 CAPLUS  
 CN L-Isoleucine, N-[N2-[N-[N-[N-[1-[N-[N-(4-azido-2-hydroxyiodobenzoyl)-L-tyrosyl]-L-isoleucyl]-L-prolyl]-L-seryl]-L-alanyl]-L- $\alpha$ -glutamyl]-N6-[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]-L-lysyl]-, [3aS-(3 $\alpha\alpha$ ,4 $\beta$ ,6 $\alpha\alpha$ )]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



PAGE 3-A

D1- I

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REFERENCE COUNT:	2	THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS' - CONTINUE? (Y)/N:y

L8 ANSWER 3 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:407340 CAPLUS

DOCUMENT NUMBER: 141:119587

TITLE: Mass spectrometric detection of affinity purified crosslinked peptides

AUTHOR(S): Hurst, Gregory B.; Lankford, Trish K.; Kennel, Stephen J.

CORPORATE SOURCE: Chemical Sciences Division, Oak Ridge National Laboratory, Oak Ridge, TN, 37831-6131, USA

SOURCE: Journal of the American Society for Mass Spectrometry (2004), 15(6), 832-839  
CODEN: JAMSEF; ISSN: 1044-0305

PUBLISHER: Elsevier Science Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Chemical crosslinking of proteins combined with mass spectrometric anal. of the tryptic digest of the products shows considerable promise as a tool for interrogating structure and geometry of proteins and protein complexes. An impediment to the use of this tool has been the difficulty of distinguishing crosslinked peptide pairs from non-crosslinked peptides, and from the products of side reactions. We describe the use of a com. available biotinylated crosslinking reagent, sulfo-SBED, that allows affinity-based enrichment of crosslinked species. An intramol. crosslink is prepared using the peptide neurotensin as a model system. Matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectra show the predicted crosslinking product, as well as several side products. Finally, we describe the optimized enrichment of biotinylated species, and reduction of non-specific binding, for a batch-mode affinity separation based on immobilized monomeric avidin.

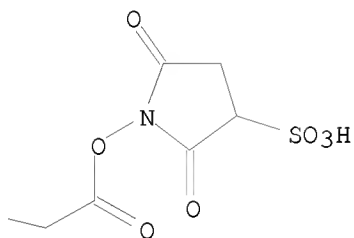
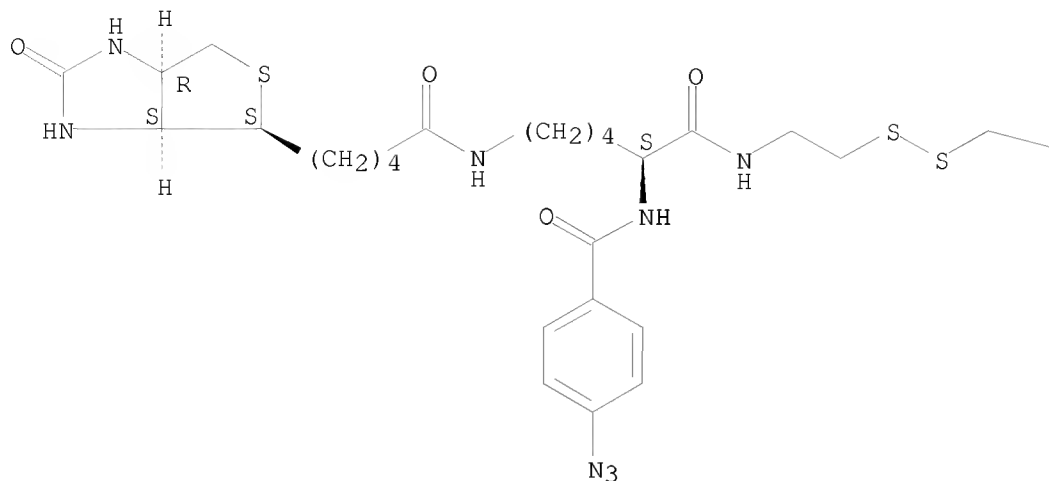
IT 179763-59-8, Sulfo-SBED

RL: RCT (Reactant); RACT (Reactant or reagent)  
(mass spectrometric detection of affinity purified crosslinked peptides)

RN 179763-59-8 CAPLUS

CN Propanoic acid, 3-[[2-[[[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-3-sulfo-1-pyrrolidinyl ester, sodium salt (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● Na

OS.CITING REF COUNT: 37 THERE ARE 37 CAPLUS RECORDS THAT CITE THIS RECORD (38 CITINGS)  
 REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:53004 CAPLUS

DOCUMENT NUMBER: 140:90343

TITLE: Photoreactive glycoconjugate and labeled photoreactive glycoconjugate, and methods for trapping and measuring carbohydrate receptor

INVENTOR(S): Sugiura, Nobuo; Takagi, Hidekazu; Kimata, Koji

PATENT ASSIGNEE(S): Seikagaku Kogyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

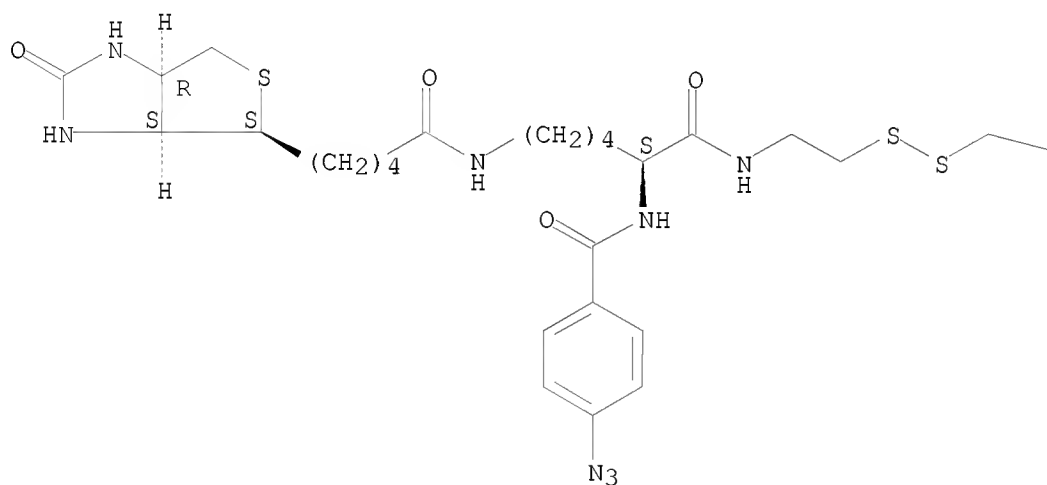
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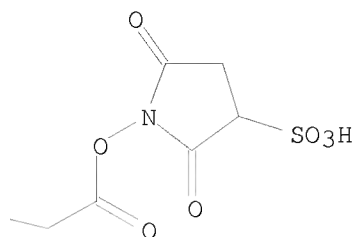
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2004018841 A 20040122 JP 2002-180539 20020620 <--  
JP 4340423 B2 20091007  
PRIORITY APPLN. INFO.: JP 2002-180539 20020620  
AB A photoreactive glycoconjugate and a labeled photoreactive glycoconjugate are provided, which are useful for studying the function and structure of a biopolymer such as a carbohydrate receptor capable of interacting with a carbohydrate. Also provided are a method for trapping a carbohydrate receptor with the photoreactive glycoconjugate, and a method for measuring a carbohydrate receptor with the labeled photoreactive glycoconjugate. The photoreactive glycoconjugate is displayed by the following formula, and the labeled photoreactive glycoconjugate is prepared by binding this photoreactive glycoconjugate with a labeling compound A-X-Y (A: lipid, X: glycoconjugate, Y: photoreactive compound residue, -: covalent bond).  
IT 179763-59-8, Sulfo-SBED  
RL: RCT (Reactant); RACT (Reactant or reagent)  
((labeled) photoreactive glycoconjugate, and methods for trapping and measuring carbohydrate receptor)  
RN 179763-59-8 CAPLUS  
CN Propanoic acid, 3-[[2-[[[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-3-sulfo-1-pyrrolidinyl ester, sodium salt (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





● Na

L8 ANSWER 5 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:640999 CAPLUS

DOCUMENT NUMBER: 138:39483

TITLE: Syntheses of novel photoaffinity probes for bioorganic studies on nyctinasty of leguminous plants

AUTHOR(S): Sugimoto, Takanori; Fujii, Tomohiko; Hatanaka, Yasumaru; Yamamura, Shosuke; Ueda, Minoru

CORPORATE SOURCE: Faculty of Science and Technology, Department of Chemistry, Laboratory of Natural Products, Keio University, Hiyoshi, Yokohama, 223-8522, Japan

SOURCE: Tetrahedron Letters (2002), 43(37), 6529-6532

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:39483

AB Two novel and non-radioactive photoaffinity probes for the bioorg. study of nyctinasty are designed and synthesized based on potassium isolespedezate, which induces leaf-opening against the leaf of *Cassia mimosoides* L. These probes bear a trifluoromethyldiazirine or diazophenyl group for photoaffinity and a biotin subunit for affinity chromatog. and chemiluminescent detection. The probes showed leaf-opening activity at  $5 \times 10^{-5}$  mol/L with leaves of *C. mimosoides*; thus, they would be an important tool for the identification of a receptor protein for potassium isolespedezate.

IT 478701-08-5P

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

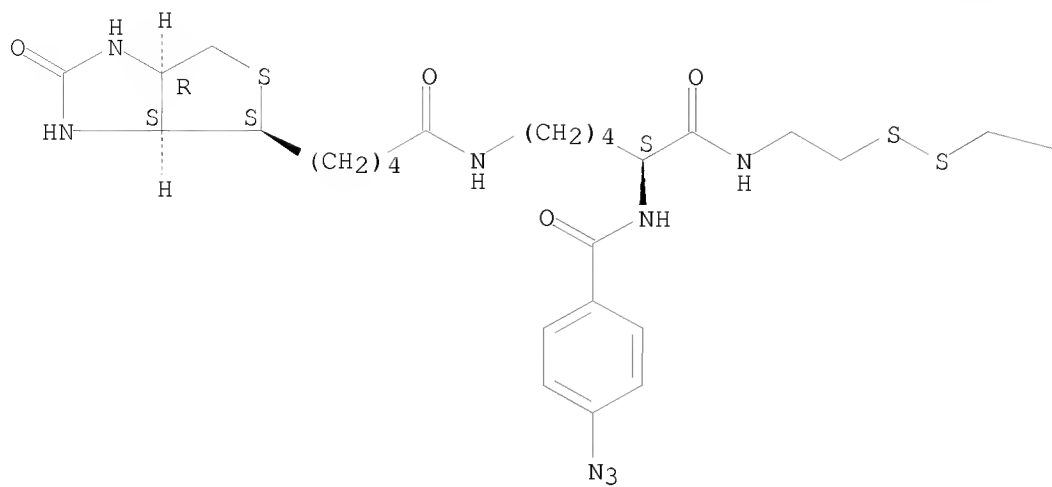
(syntheses of novel photoaffinity probes based on potassium isolespedezate for bioorg. studies on nyctinasty of leguminous plants)

RN 478701-08-5 CAPLUS

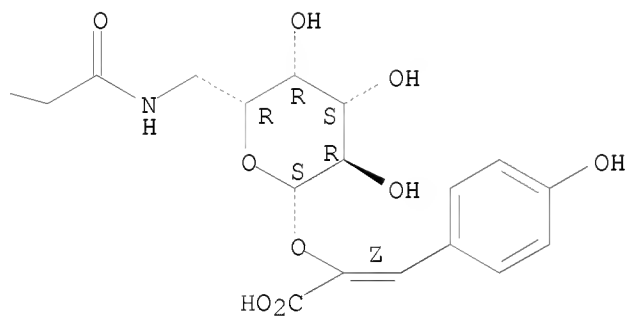
CN 2-Propenoic acid, 2-[[6-[[3-[[2-[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-1-oxopropyl]amino]-6-deoxy- $\beta$ -D-galactopyranosyl]oxy]-3-(4-hydroxyphenyl)-, monopotassium salt, (2Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Double bond geometry as shown.



● K



IT 179763-59-8

RL: RCT (Reactant); RACT (Reactant or reagent)

(syntheses of novel photoaffinity probes based on potassium  
isolespedezate for bioorg. studies on nyctinasty of leguminous plants)

RN 179763-59-8 CAPLUS

CN Propanoic acid, 3-[[2-[[[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-3-sulfo-1-pyrrolidinyl ester, sodium salt (1:1) (CA INDEX NAME)

Absolute stereochemistry.

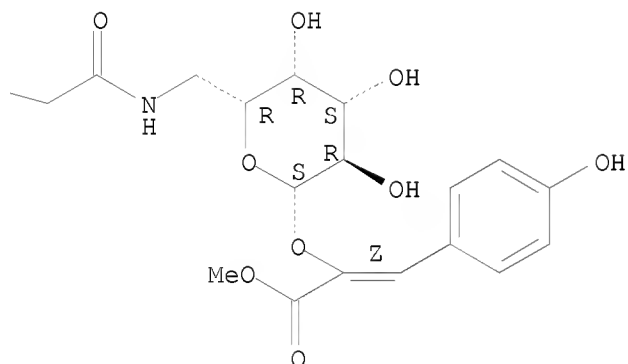
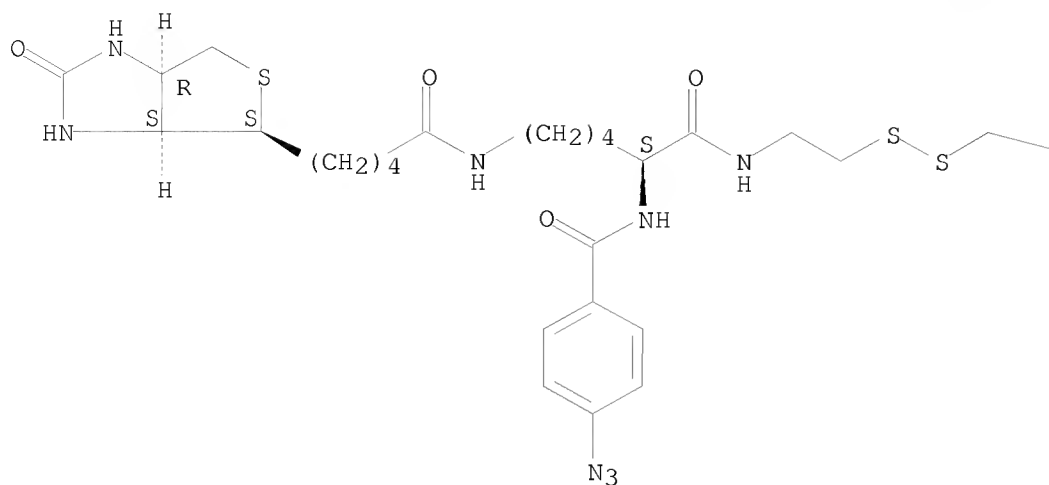


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IT      478701-22-3P
        RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
        (Reactant or reagent)
        (syntheses of novel photoaffinity probes based on potassium
        isolespedezate for bioorg. studies on nyctinasty of leguminous plants)
RN      478701-22-3    CAPLUS
CN      2-Propenoic acid, 2-[[6-[[3-[[2-[[[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-
        [(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-
        oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-1-oxopropyl]amino]-6-deoxy-
        β-D-galactopyranosyl]oxy]-3-(4-hydroxyphenyl)-, methyl ester, (2Z)-
        (CA INDEX NAME)

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Absolute stereochemistry.  
Double bond geometry as shown.



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS  
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REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:574920 CAPLUS

DOCUMENT NUMBER: 137:140337

TITLE: Preparation of hydroxyhexafluoropropylarenes as  
malonyl-CoA decarboxylase inhibitors.

INVENTOR(S): Arrhenius, Thomas; Chen, Mi; Cheng, Jie Fei; Haramura,  
Masayuki; Huang, Yujin; Nadzan, Alex; Tith, Sovouthy;  
Wallace, David; Zhang, Lin; Brown, Steve; Harmon,  
Charles

PATENT ASSIGNEE(S): Chugai Seiyaku Kabushiki Kaisha, Japan

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

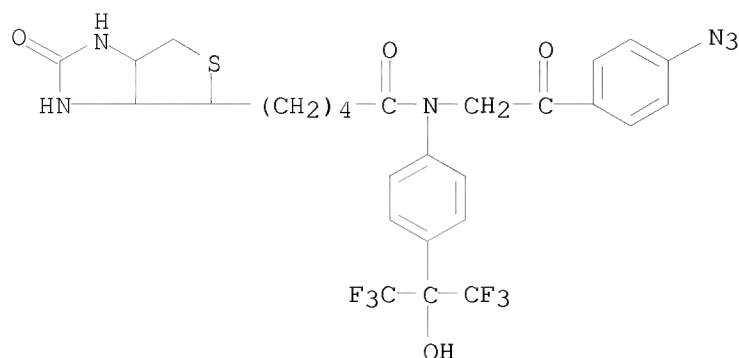
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

## PATENT INFORMATION:

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JP 4503232	B2	20100714		
AT 359773	T	20070515	AT 2002-703196	20020122
ES 2284817	T3	20071116	ES 2002-703196	20020122
CN 101596191	A	20091209	CN 2009-10139558	20020126
US 20040087627	A1	20040506	US 2003-466856	20030721 <--
US 7385063	B2	20080610		
JP 2008007510	A	20080117	JP 2007-185377	20070717
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PRIORITY APPLN. INFO.:				
			US 2001-264552P	P 20010126
			US 2001-265380P	P 20010126
			JP 2002-559024	A3 20020122
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			WO 2002-US1814	W 20020122
			CN 2002-803537	A3 20020126
			JP 2002-559032	A3 20020126
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT				
OTHER SOURCE(S): CASREACT 137:140337; MARPAT 137:140337				
AB	A method for the inhibition of malonyl-CoA decarboxylase (MCD) comprises administration of W[C(OH)(CF <sub>3</sub> ) <sub>2</sub> ] [W = (substituted) Ph, pyridinyl, pyrazolyl, furyl, thienyl, pyrrolyl]. Thus, 4-(EtNH)C <sub>6</sub> H <sub>4</sub> [C(OH)(CF <sub>3</sub> ) <sub>2</sub> ], poly(4-vinylpyridine), and isobutyryl chloride were stirred 14 h in CH <sub>2</sub> Cl <sub>2</sub> to give 41% 4-[Me <sub>2</sub> CHCO(Et)N]C <sub>6</sub> H <sub>4</sub> [C(OH)(CF <sub>3</sub> ) <sub>2</sub> ]. Tested title compds. inhibited MCD with IC <sub>50</sub> = 0.007-0.557 μM.			
IT	444620-98-8 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of hydroxyhexafluoropropylarenes as malonyl-CoA decarboxylase inhibitors)			
RN	444620-98-8 CAPLUS			
CN	1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[2-(4-azidophenyl)-2-oxoethyl]hexahydro-2-oxo-N-[4-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]phenyl]- (CA INDEX NAME)			



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS  
RECORD (11 CITINGS)  
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:105070 CAPLUS

DOCUMENT NUMBER: 134:157723

TITLE: Synthesis and characterization of insulin-like growth factor (IGF)-1 photoprobes selective for the IGF-binding proteins (IGFBPs) photoaffinity labeling of the IGF-binding domain on IGFBP-2

AUTHOR(S): Horney, Mark J.; Evangelista, Caroline A.; Rosenzweig, Steven A.

CORPORATE SOURCE: Department of Cell and Molecular Pharmacology and Experimental Therapeutics, Medical University of South Carolina, Charleston, SC, 29425, USA

SOURCE: Journal of Biological Chemistry (2001), 276(4), 2880-2889

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular Biology

DOCUMENT TYPE: Journal

LANGUAGE: English

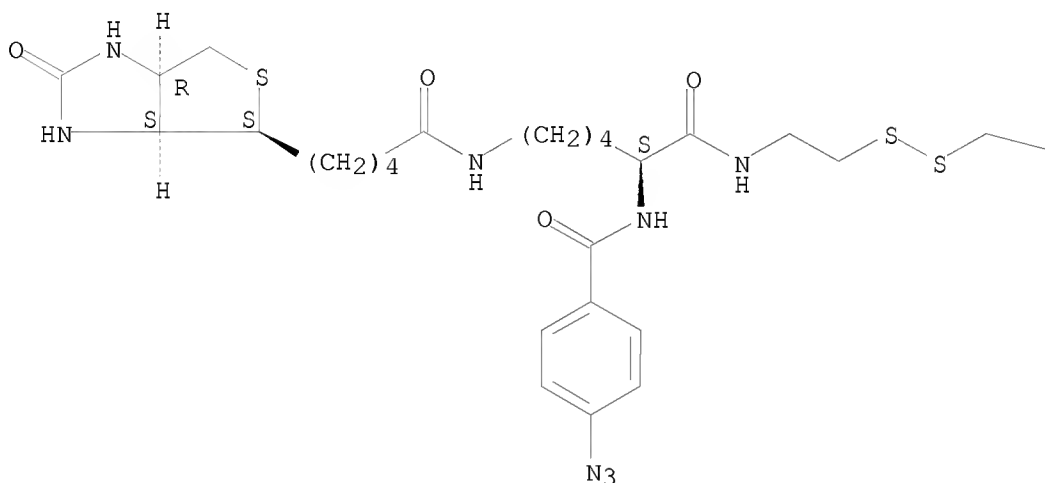
AB Elevated insulin-like growth factor (IGF)-1 levels are prognostic for the development of prostate and breast cancers and exacerbate the complications of diabetes. In each case, perturbation of the balance between IGF-1/2, the IGF-1 receptor, and the IGF-binding proteins (IGF-BPs) leads to elevated IGF-1 sensitivity. Blockade of IGF action in these diseases would be clin. significant. Unfortunately, effective IGF antagonists are currently unavailable. The IGFBPs exhibit high affinity and specificity for the IGFs and serve as natural IGF antagonists, limiting their mitogenic/anti-apoptotic effects. As an initial step in designing IGFBP-based agents that antagonize IGF action, we have begun to analyze the structure of the IGF-binding site on IGFBP-2. To this end, two IGF-1 photoprobes, N $\alpha$ Gly1-(4-azidobenzoyl)-IGF-1 (abG1IGF-1) and N $\alpha$ Gly1-([2-6-(biotinamido)-2(p-azidobenzamido)hexanoamido]ethyl-1,3'-dithiopropionoyl)-IGF-1 (bedG1IGF-1), selective for the IGFBPs were synthesized by derivatization of the  $\alpha$ -amino group of Gly1, known to be part of the IGFBP-binding domain. Mass spectrometric anal. of the reduced, alkylated, and trypsin-digested abG1IGF-1·recombinant human IGFBP-2 (rhIGFBP-2) complex indicated photoincorporation near the carboxyl terminus of rhIGFBP-2, between residues 266 and 287. Mass spectrometric anal. of avidin-purified tryptic peptides of the bedG1IGF-1·rhIGFBP-2 complex revealed photoincorporation within residues 212-227. Taken together, these data indicate that the

IGFBP-binding domain on IGF-1 contacts the distal third of IGFBP-2, providing evidence that the IGF-1-binding domain is located within the C terminus of IGFBP-2.

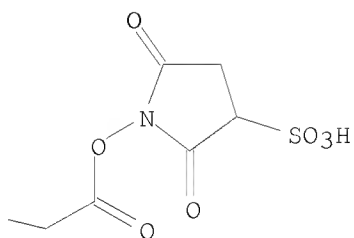
IT 179763-59-8DP, Sulfo-SBED, reaction products with IGF-1  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (synthesis and characterization of insulin-like growth factor (IGF)-1 photoprobes selective for IGF-binding proteins (IGFBPs) photoaffinity labeling of IGF-binding domain on IGFBP-2)  
 RN 179763-59-8 CAPLUS  
 CN Propanoic acid, 3-[[2-[[[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-3-sulfo-1-pyrrolidinyl ester, sodium salt (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



● Na

OS.CITING REF COUNT: 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)  
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L8 ANSWER 8 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:635337 CAPLUS  
DOCUMENT NUMBER: 133:247746  
TITLE: Oligonucleotide immobilization on micropatterned streptavidin surfaces  
AUTHOR(S): Sabanayagam, Chandran R.; Smith, Cassandra L.; Cantor, Charles R.  
CORPORATE SOURCE: Center for Advanced Biotechnology, Boston University, Boston, MA, 02215, USA  
SOURCE: Nucleic Acids Research (2000), 28(8), e33, ii-iv  
CODEN: NARHAD; ISSN: 0305-1048  
PUBLISHER: Oxford University Press  
DOCUMENT TYPE: Journal  
LANGUAGE: English

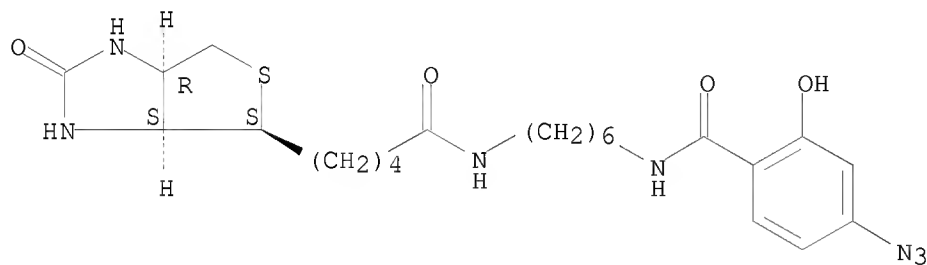
AB The authors describe a simple procedure for photolithog. patterning of streptavidin on silicon substrates. Long wavelength UV (365 nm) light was used to direct the covalent attachment of photoactivatable biotin onto silylated silicon wafers. Fluorescently labeled streptavidin was found to bind only in areas exposed to the light. The authors used this procedure to selectively pattern streptavidin inside microwells etched in silicon, and the authors investigated the binding characteristics of biotinylated oligonucleotides of lengths, 54 and 99 bases. The binding curves were found to fit the functional form of the Langmuir isotherm, with binding saturation proportional to  $n^{-3/4}$ .

IT 288860-12-8  
RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST (Analytical study); USES (Uses)  
(oligonucleotide immobilization on micropatterned streptavidin surfaces)

RN 288860-12-8 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[6-[(4-azido-2-hydroxybenzoyl)amino]hexyl]hexahydro-2-oxo-,  
(3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)  
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:382163 CAPLUS  
DOCUMENT NUMBER: 133:173857  
TITLE: Mapping Protein-Protein Interactions in the Bacteriophage T4 DNA Polymerase Holoenzyme Using a Novel Trifunctional Photo-cross-linking and Affinity Reagent  
AUTHOR(S): Alley, Stephen C.; Ishmael, Faoud T.; Jones, A. Daniel; Benkovic, Stephen J.

CORPORATE SOURCE: Department of Chemistry and Department of Biochemistry and Molecular Biology Hershey Medical Center, Pennsylvania State University, University Park, PA, 16802, USA

SOURCE: Journal of the American Chemical Society (2000), 122(25), 6126-6127  
CODEN: JACSAT; ISSN: 0002-7863

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:173857

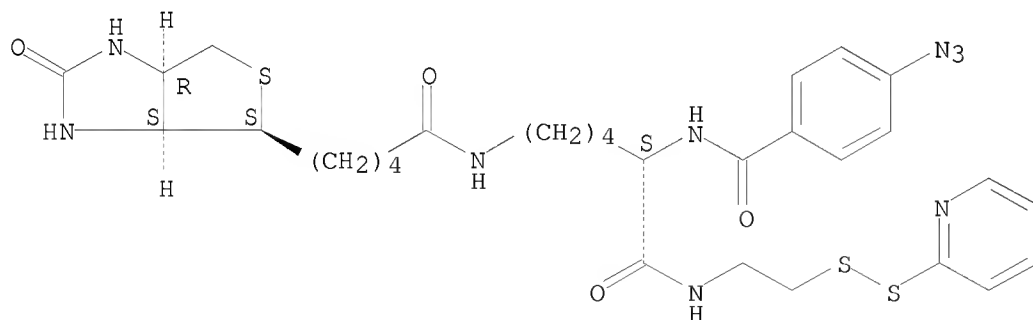
AB In bacteriophage T4, the DNA polymerase holoenzyme forms the core of the DNA replication system, consisting of the DNA polymerase (gp43), a trimeric, circular processivity factor called the sliding clamp (gp45), and the clamp loader (a 4:1 complex of gp44 and gp62) that hydrolyzes ATP to assemble the holoenzyme. A novel trifunctional photo-crosslinking and affinity agent was synthesized; the three functional groups are (1) a thiol-reactive 2-thiopyridine mixed disulfide for conjugation to a bait protein, (2) a photoactivatable aryl azide for photo-crosslinking to a target protein (the target protein may be the same protein as the bait, resulting in intra- or intersubunit photo-crosslinks), and (3) the affinity probe biotin, which can be used for purification and visualization of photo-crosslinked proteins. The utility of the photo-crosslinking agent was demonstrated with the gp45 mutant I107C, which contains a single cysteine per monomer. The interaction of I107C with gp44/gp62 was investigated using a procedure similar to a Western blot.

IT 288611-68-7P  
RL: NUU (Other use, unclassified); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (preparation of a novel trifunctional photo-crosslinking and affinity reagent for mapping protein-protein interactions in the bacteriophage T4 DNA polymerase holoenzyme)

RN 288611-68-7 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[(5S)-5-[(4-azidobenzoyl)amino]-6-oxo-6-[[2-(2-pyridinyldithio)ethyl]amino]hexyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



IT 179763-59-8, Sulfo-SBED  
RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of a novel trifunctional photo-crosslinking and affinity reagent for mapping protein-protein interactions in the bacteriophage T4 DNA polymerase holoenzyme)

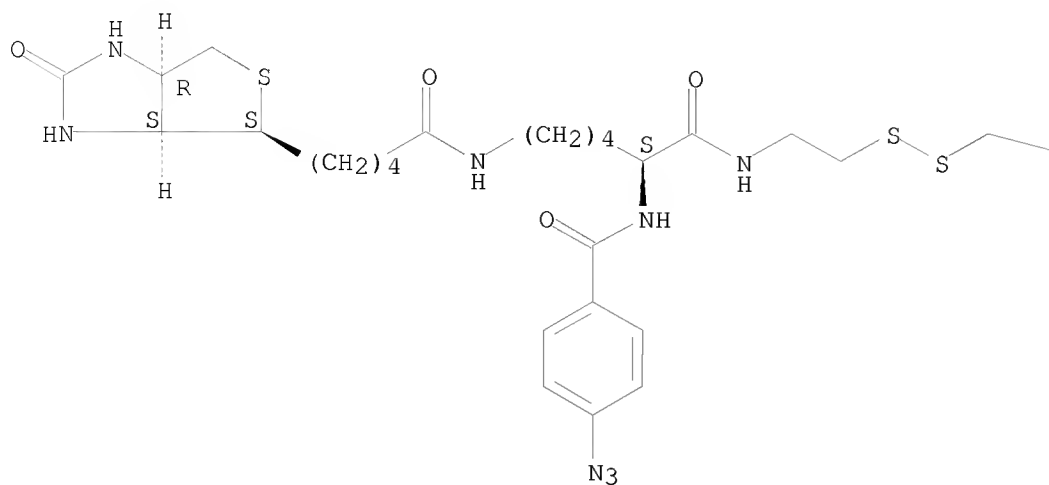
RN 179763-59-8 CAPLUS

CN Propanoic acid, 3-[[2-[[[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-3-sulfo-1-pyrrolidinyl ester,

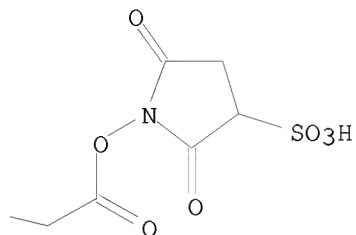
sodium salt (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

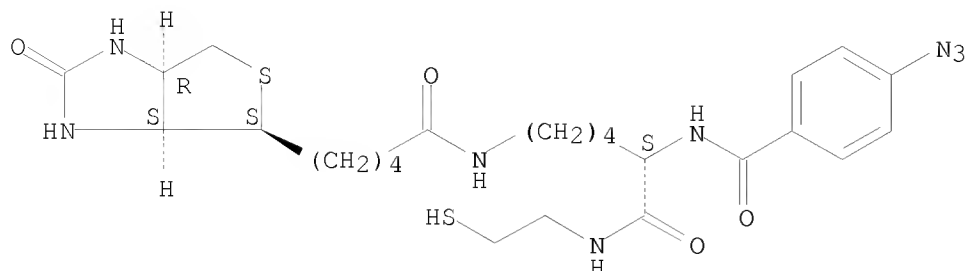


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IT 288611-67-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(preparation of a novel trifunctional photo-crosslinking and affinity  
reagent for mapping protein-protein interactions in the bacteriophage  
T4 DNA polymerase holoenzyme)  
RN 288611-67-6 CAPLUS  
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[(5S)-5-[(4-azidobenzoyl)amino]-6-[(2-mercaptoethyl)amino]-6-  
oxohexyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.





OS.CITING REF COUNT: 47 THERE ARE 47 CAPLUS RECORDS THAT CITE THIS  
RECORD (47 CITINGS)  
REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2000:357818 CAPLUS  
DOCUMENT NUMBER: 133:190005  
TITLE: Segregation of Micrometer-Dimension Biosensor Elements  
on a Variety of Substrate Surfaces  
AUTHOR(S): Brooks, Sunday A.; Dontha, Narasaiah; Davis, C.  
Brandon; Stuart, Joan K.; O'Neill, Geoff; Kuhr, Werner  
G.  
CORPORATE SOURCE: Department of Chemistry, University of California,  
Riverside, CA, 92521, USA  
SOURCE: Analytical Chemistry (2000), 72(14),  
3253-3259  
CODEN: ANCHAM; ISSN: 0003-2700  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English

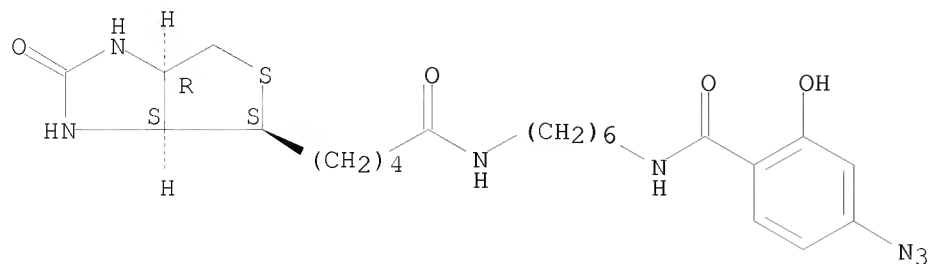
AB With the rapid development of micro total anal. systems and sensitive  
biosensing technologies, it is often desirable to immobilize biomols. to  
small areas of surfaces other than silicon. To this end, photolithog.  
techniques were used to derivatize micrometer-sized, spatially segregated  
biosensing elements on several different substrate surfaces. Both an  
interference pattern and a dynamic confocal patterning apparatus were used to  
control the dimensions and positions of immobilized regions. In both of  
these methods, a UV laser was used to initiate attachment of a photoactive  
biotin mol. to the substrate surfaces. Once biotin was attached to a  
substrate, biotin/avidin/biotin chemical was used to attach fluorescently  
labeled or nonlabeled avidin and biotinylated sensing elements such as  
biotinylated antibodies. Dimensions of 2-10  $\mu\text{m}$  were achievable with  
these methods. A wide variety of materials, including glassy carbon,  
quartz, acrylic, polystyrene, acetonitrile-butadiene-styrene,  
polycarbonate, and poly(dimethylsiloxane), were used as substrates.  
Nitrene- and carbene-generating photolinkers were investigated to achieve  
the most homogeneous films. These techniques were applied to create a  
prototype microfluidic sensor device that was used to sep. fluorescently  
labeled secondary antibodies.

IT 288860-12-8  
RL: ARU (Analytical role, unclassified); DEV (Device component use); RCT  
(Reactant); ANST (Analytical study); RACT (Reactant or reagent); USES  
(Uses)  
(segregation of micrometer-dimension biosensor elements on a variety of  
substrate surfaces)

RN 288860-12-8 CAPLUS  
CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[6-[(4-azido-2-hydroxybenzoyl)amino]hexyl]hexahydro-2-oxo-,

(3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 36 THERE ARE 36 CAPLUS RECORDS THAT CITE THIS RECORD (36 CITINGS)  
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:155858 CAPLUS

DOCUMENT NUMBER: 133:14241

TITLE: Use of an affinity proteomics approach for the identification of low-abundant bacterial adhesins as applied on the Lewisb-binding adhesin of Helicobacter pylori

AUTHOR(S): Larsson, T.; Bergstrom, J.; Nilsson, C.; Karlsson, K.-A.

CORPORATE SOURCE: Institute of Medical Biochemistry, Goteborg University, Goteborg, SE-405 30, Swed.

SOURCE: FEBS Letters (2000), 469(2,3), 155-158  
CODEN: FEBLAL; ISSN: 0014-5793

PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Microbial attachment to host cell surfaces is considered to be the first essential step for colonization and infection. In most known cases, attachment is mediated by a specific protein-carbohydrate interaction. We have used a carbohydrate-containing crosslinking probe to select bacterial surface adhesins for trypsin digestion, MALDI-TOF mass spectrometry and identification against genome sequence. The present paper describes this functional proteomics approach for identification of the recently cloned low-abundant Lewisb-binding adhesin of Helicobacter pylori. Protein identification was obtained through the enrichment of approx. 300 fmol of adhesin from solubilized cells.

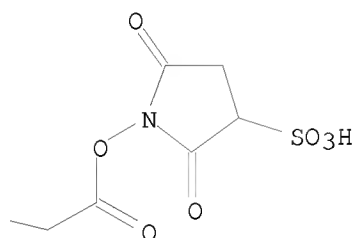
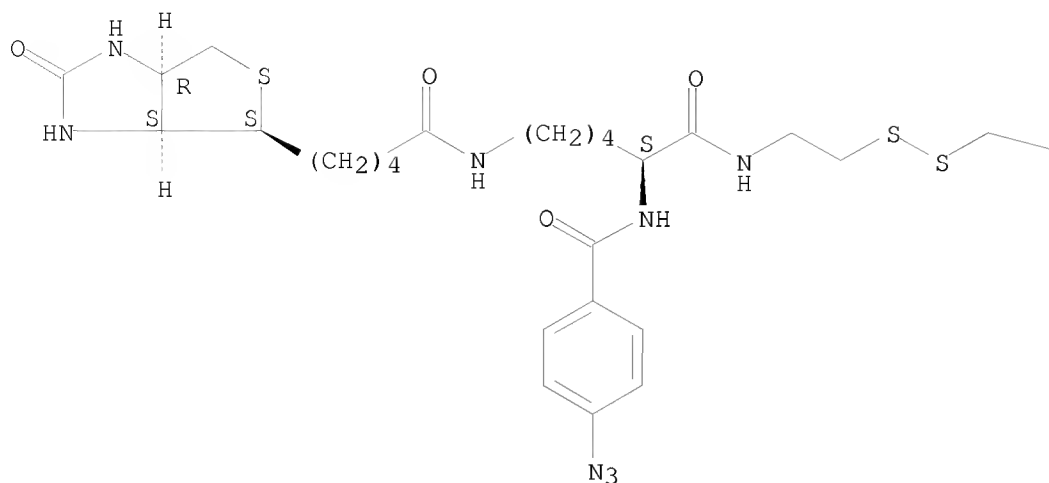
IT 179763-59-8, Sulfo-SBED

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(use of affinity proteomics approach for identification of low-abundant bacterial adhesins as applied on Lewisb-binding adhesin of Helicobacter pylori)

RN 179763-59-8 CAPLUS

CN Propanoic acid, 3-[[2-[[[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-3-sulfo-1-pyrrolidinyl ester, sodium salt (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● Na

OS.CITING REF COUNT: 27 THERE ARE 27 CAPLUS RECORDS THAT CITE THIS  
RECORD (27 CITINGS)  
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 12 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1999:569927 CAPLUS  
DOCUMENT NUMBER: 131:334755  
TITLE: Synthesis and biological activity of a  
photoaffinity-biotinylated pheromone-biosynthesis  
activating neuropeptide (PBAN) analog  
AUTHOR(S): Rafaeli, Ada; Gileadi, Carina  
CORPORATE SOURCE: Department of Stored Products, Pheromone Research  
Laboratory, Volcani Center, Bet Dagan, 50250, Israel  
SOURCE: Peptides (New York) (1999), 20(7), 787-794  
CODEN: PPTDD5; ISSN: 0196-9781  
PUBLISHER: Elsevier Science Inc.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB To study the mode of action of pheromone-biosynthesis activating  
neuropeptide (PBAN) at the receptor level and for receptor purification, we  
synthesized and tested the biol. properties of a photoaffinity

biotinylated PBAN analog N-[N-(4-azido-tetrafluorobenzoyl)-biocytinyloxy]-succinimide (Atf-Bct-NHS-PBAN). The Atf-Bct-NHS-PBAN was separated from unreacted reagent and synthetic Hez-PBAN by high-performance liquid chromatog. Conjugated biotin was detected by using enzyme-linked assay as well as tricine SDS-PAGE. The biol. activity of purified Atf-Bct-NHS-PBAN was confirmed using both in vivo and in vitro pheromonotropic bioassays. These observations indicate that Atf-Bct-NHS-PBAN is a full agonist of PBAN action in pheromone glands and may be used to study PBAN receptors by employing avidin coupled to various reporter groups.

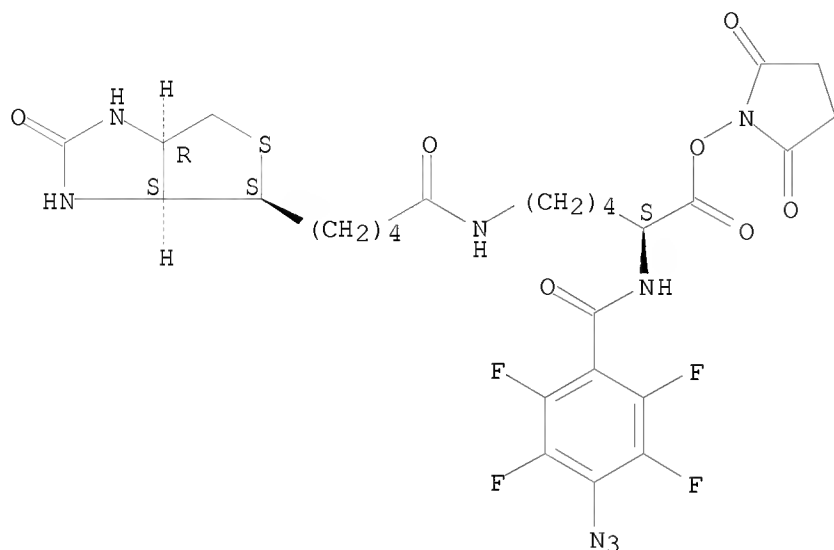
IT 249749-25-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
(synthesis and biol. activity of a photoaffinity-biotinylated pheromone-biosynthesis activating neuropeptide analog)

RN 249749-25-5 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[(5S)-5-[(4-azido-2,3,5,6-tetrafluorobenzoyl)amino]-6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)  
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L8 ANSWER 6 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

PI WO 2002058690 A2 20020801

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 EP 1353662 B1 20070418

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RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL  
 (Biological study); USES (Uses)

(preparation of hydroxyhexafluoropropylarenes as malonyl-CoA decarboxylase  
 inhibitors)

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'RN' IS NOT A VALID FIELD CODE  
L9 0 444620-98-8/RN

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	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-26.35

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FILE COVERS 1907 - 4 Oct 2010 VOL 153 ISS 15  
FILE LAST UPDATED: 3 Oct 2010 (20101003/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2010  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2010

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2010.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

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L10 1 444620-98-8/RN  
(444620-98-8 (NOTL) 444620-98-8D )

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L10 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2002:574920 CAPLUS  
DOCUMENT NUMBER: 137:140337  
TITLE: Preparation of hydroxyhexafluoropropylarenes as  
malonyl-CoA decarboxylase inhibitors.  
INVENTOR(S): Arrhenius, Thomas; Chen, Mi; Cheng, Jie Fei; Haramura,  
Masayuki; Huang, Yujin; Nadzan, Alex; Tith, Sovouthy;

WALLACE, David; Zhang, Lin; Brown, Steve; Harmon, Charles  
 PATENT ASSIGNEE(S): Chugai Seiyaku Kabushiki Kaisha, Japan  
 SOURCE: PCT Int. Appl., 63 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002058690	A2	20020801	WO 2002-US1814	20020122
WO 2002058690	A3	20030424		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002236830	A1	20020806	AU 2002-236830	20020122
EP 1353662	A2	20031022	EP 2002-703196	20020122
EP 1353662	B1	20070418		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004521113	T	20040715	JP 2002-559024	20020122
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AT 359773	T	20070515	AT 2002-703196	20020122
ES 2284817	T3	20071116	ES 2002-703196	20020122
CN 101596191	A	20091209	CN 2009-10139558	20020126
US 20040087627	A1	20040506	US 2003-466856	20030721
US 7385063	B2	20080610		
JP 2008007510	A	20080117	JP 2007-185377	20070717
JP 2008001719	A	20080110	JP 2007-227557	20070903
JP 2008100998	A	20080501	JP 2007-267407	20071015
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PRIORITY APPLN. INFO.:  
 US 2001-264552P P 20010126  
 US 2001-265380P P 20010126  
 JP 2002-559024 A3 20020122  
 JP 2002-563930 A3 20020122  
 WO 2002-US1814 W 20020122  
 CN 2002-803537 A3 20020126  
 JP 2002-559032 A3 20020126

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 137:140337; MARPAT 137:140337  
 AB A method for the inhibition of malonyl-CoA decarboxylase (MCD) comprises administration of W[C(OH)(CF<sub>3</sub>)<sub>2</sub>] [W = (substituted) Ph, pyridinyl, pyrazolyl, furyl, thienyl, pyrrolyl]. Thus, 4-(EtNH)C<sub>6</sub>H<sub>4</sub>[C(OH)(CF<sub>3</sub>)<sub>2</sub>], poly(4-vinylpyridine), and isobutyryl chloride were stirred 14 h in CH<sub>2</sub>Cl<sub>2</sub> to give 41% 4-[Me<sub>2</sub>CHCO(Et)N]C<sub>6</sub>H<sub>4</sub>[C(OH)(CF<sub>3</sub>)<sub>2</sub>]. Tested title compds. inhibited MCD with IC<sub>50</sub> = 0.007-0.557 μM.

OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)  
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4 248 S L3 FULL  
L5 STRUCTURE UPLOADED  
L6 99 S L5 FULL

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L7 60 S L6  
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FILE 'CAPLUS' ENTERED AT 17:44:15 ON 04 OCT 2010

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L9 0 S 444620-98-8/RN

FILE 'CAPLUS' ENTERED AT 17:44:36 ON 04 OCT 2010  
L10 1 S 444620-98-8/RN

=> d ibib abs hitstr 18 1-8

L8 ANSWER 1 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:772456 CAPLUS

DOCUMENT NUMBER: 142:389159

TITLE: Synthetic probe compounds for the bioorganic studies  
of nyctinastic leaf-movement in leguminous plants

AUTHOR(S): Sugimoto, Takanori; Fujii, Tomohiko; Yamamura,  
Shosuke; Ueda, Minoru

CORPORATE SOURCE: Laboratory of Natural Products, Department of  
Chemistry, Faculty of Science and Technology, Keio  
University, Hiyoshi, Yokohama, 223-8522, Japan

SOURCE: Trends in Heterocyclic Chemistry (2003), 9,  
101-107

CODEN: TIHCE6

PUBLISHER: Research Trends

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:389159

AB Most leguminous plants close their leaves in the evening, and open them  
early in the morning according to the circadian rhythm controlled by a  
biol. clock. These movements involve two bioactive substances,  
leaf-opening and closing substance. To investigate the mechanism of  
nyctinasty on mol. level, we synthesized two bioactive probes: one is a



fluorescence labeled probe for identifying the target cell of leaf-movement substance; the other is a photoaffinity probe for identification of the receptor protein for bioactive substances. Then we carried out bioorg. studies of nyctinasty using these probes.

IT 478701-22-3P

RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

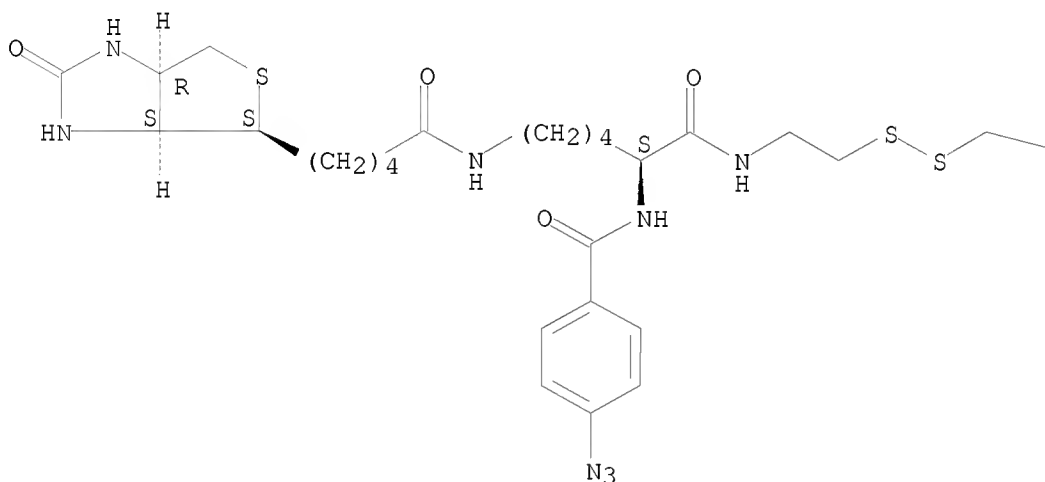
(photoaffinity probe preparation; preparation synthetic probe compds. for the bioorg. studies of nyctinastic leaf-movement in leguminous plants)

RN 478701-22-3 CAPLUS

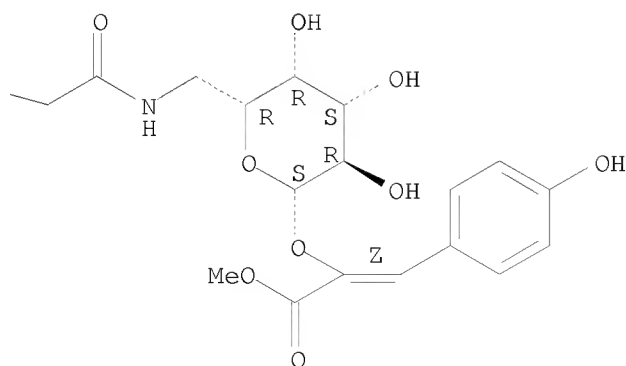
CN 2-Propenoic acid, 2-[[6-[[3-[[2-[[[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-1-oxopropyl]amino]-6-deoxy-β-D-galactopyranosyl]oxy]-3-(4-hydroxyphenyl)-, methyl ester, (2Z)- (CA INDEX NAME)

Absolute stereochemistry.  
Double bond geometry as shown.

PAGE 1-A



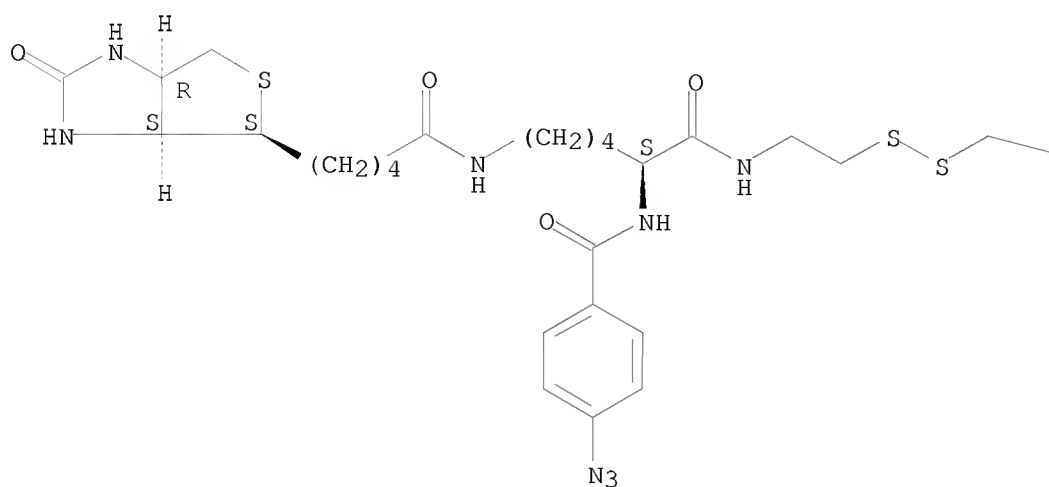
PAGE 1-B



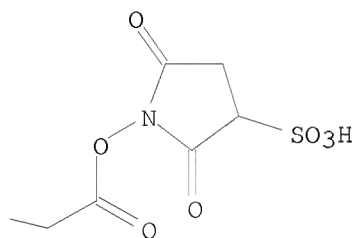
IT 179763-59-8, Sulfo-SBED  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (photoaffinity probe preparation; preparation synthetic probe compds. for  
 the bioorg. studies of nyctinastic leaf-movement in leguminous plants)  
 RN 179763-59-8 CAPLUS  
 CN Propanoic acid, 3-[[2-[[[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-3-sulfo-1-pyrrolidinyl ester, sodium salt (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



● Na

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2004:640675 CAPLUS  
 DOCUMENT NUMBER: 141:327885  
 TITLE: Targeted Protein Functionalization Using His-Tags  
 AUTHOR(S): Meredith, Gavin D.; Wu, Hayley Y.; Allbritton, Nancy L.

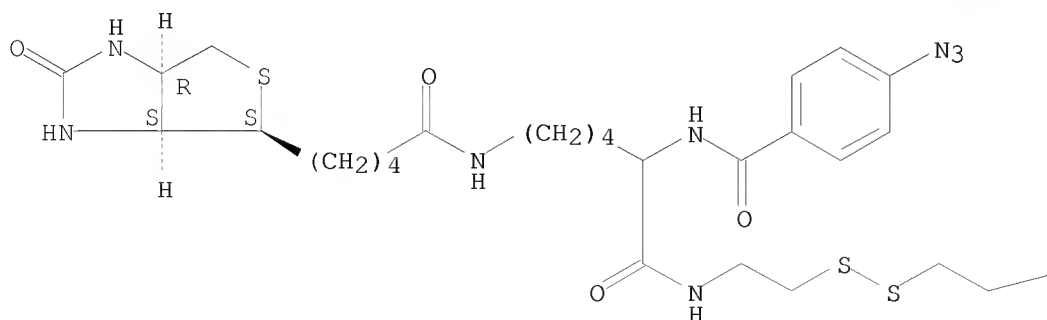
CORPORATE SOURCE: Department of Physiology Biophysics, University of California - Irvine, Irvine, CA, 92697-4560, USA  
 SOURCE: Bioconjugate Chemistry (2004), 15(5), 969-982  
 CODEN: BCCHE\$; ISSN: 1043-1802  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 141:327885

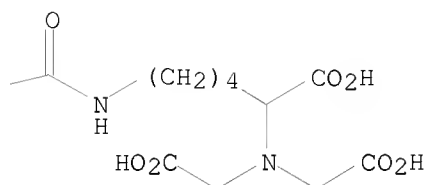
AB With the impressive growth in gene sequence data that has become available, recombinant proteins represent an increasingly vast source of mol. components, with unique functional and structural properties, for use in biotechnol. applications and devices. To facilitate the use, manipulation, and integration of such mols. into devices, a controllable method for their chemical modification was developed. In this approach, a trifunctional labeling reagent first recognizes and binds a His-tag on the target protein's surface. After binding, a photoreactive group on the trifunctional mol. is triggered to create a covalent linkage between the reagent and the target protein. The third moiety on the labeling reagent can be varied to bring unique chemical functionality to the target protein. This approach provides: (1) specificity in that only His-tagged targets are modified, (2) regio-specific control in that the target is modified proximal to the His-tag, the position of which can be varied, and (3) stoichiometric control in that the number modifications is limited by the binding capacity of the His-tag. Two such labeling reagents were designed, synthesized, and used to modify both N- and C-terminally His-tagged versions of the enzyme murine dihydrofolate reductase (mDHFR). The first reagent biotinylated the enzyme, while the second served to attach an oligonucleotide to yield a protein-DNA conjugate. In all cases, modification in this manner brings new functionality to the protein while leaving the enzymic activity intact. The protein-DNA conjugate was used to specifically immobilize the active enzyme through DNA hybridization onto polystyrene microspheres, a step toward creating a functional protein microarray.

IT 769939-91-5P  
 RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
 (targeted protein functionalization using His-tags with DNA conjugate)  
 RN 769939-91-5 CAPLUS  
 CN 13,14-Dithia-3,9,17,24-tetraazanonacosanoic acid,  
 19-[(4-azidobenzoyl)amino]-4-carboxy-3-(carboxymethyl)-29-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-10,18,25-trioxo- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





IT 769939-90-4

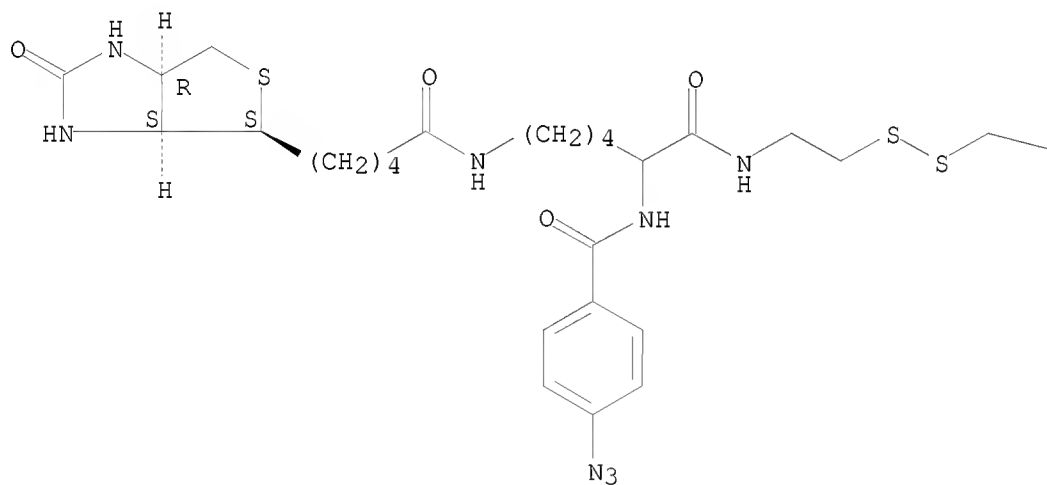
RL: RCT (Reactant); RACT (Reactant or reagent)

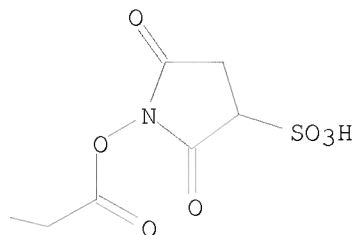
(targeted protein functionalization using His-tags with DNA conjugate)

RN 769939-90-4 CAPLUS

CN Propanoic acid, 3-[[2-[[2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-3-sulfo-1-pyrrolidinyl ester (CA INDEX NAME)

Absolute stereochemistry.





OS.CITING REF COUNT: 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)  
 REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:407340 CAPLUS

DOCUMENT NUMBER: 141:119587

TITLE: Mass spectrometric detection of affinity purified crosslinked peptides

AUTHOR(S): Hurst, Gregory B.; Lankford, Trish K.; Kennel, Stephen J.

CORPORATE SOURCE: Chemical Sciences Division, Oak Ridge National Laboratory, Oak Ridge, TN, 37831-6131, USA

SOURCE: Journal of the American Society for Mass Spectrometry (2004), 15(6), 832-839  
 CODEN: JAMSEF; ISSN: 1044-0305

PUBLISHER: Elsevier Science Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Chemical crosslinking of proteins combined with mass spectrometric anal. of the tryptic digest of the products shows considerable promise as a tool for interrogating structure and geometry of proteins and protein complexes. An impediment to the use of this tool has been the difficulty of distinguishing crosslinked peptide pairs from non-crosslinked peptides, and from the products of side reactions. We describe the use of a com. available biotinylated crosslinking reagent, sulfo-SBED, that allows affinity-based enrichment of crosslinked species. An intramol. crosslink is prepared using the peptide neurotensin as a model system. Matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectra show the predicted crosslinking product, as well as several side products. Finally, we describe the optimized enrichment of biotinylated species, and reduction of non-specific binding, for a batch-mode affinity separation based on immobilized monomeric avidin.

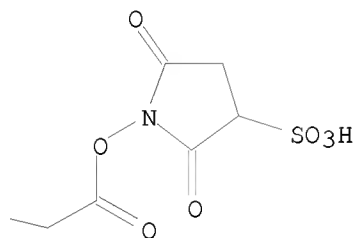
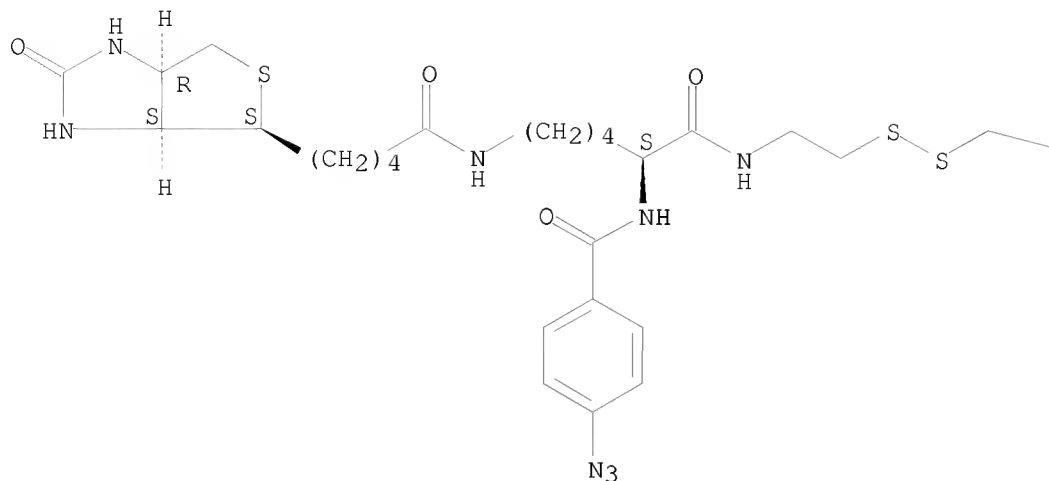
IT 179763-59-8, Sulfo-SBED

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (mass spectrometric detection of affinity purified crosslinked peptides)

RN 179763-59-8 CAPLUS

CN Propanoic acid, 3-[[2-[[[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-3-sulfo-1-pyrrolidinyl ester, sodium salt (1:1) (CA INDEX NAME)

Absolute stereochemistry.



● Na

OS.CITING REF COUNT: 37 THERE ARE 37 CAPLUS RECORDS THAT CITE THIS RECORD (38 CITINGS)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:53004 CAPLUS

DOCUMENT NUMBER: 140:90343

TITLE: Photoreactive glycoconjugate and labeled photoreactive glycoconjugate, and methods for trapping and measuring carbohydrate receptor

INVENTOR(S): Sugiura, Nobuo; Takagi, Hidekazu; Kimata, Koji

PATENT ASSIGNEE(S): Seikagaku Kogyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

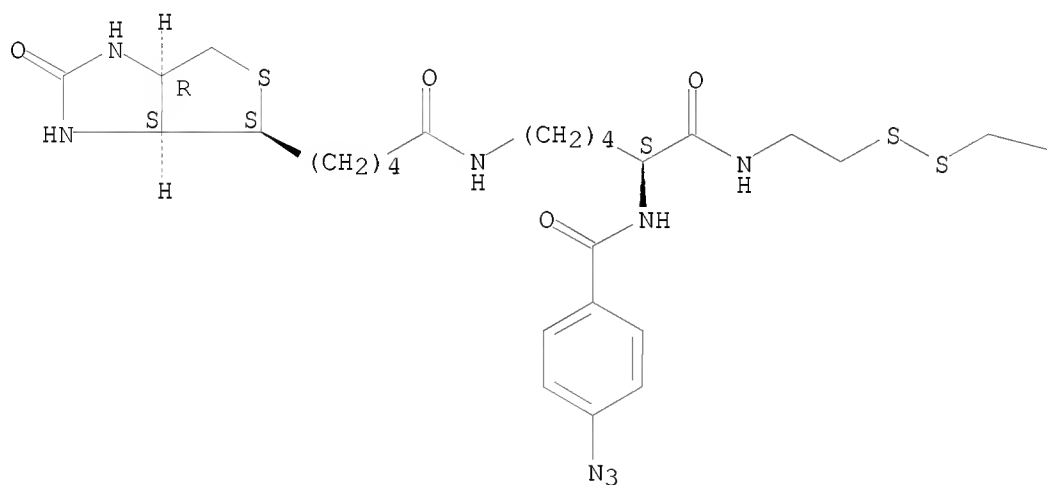
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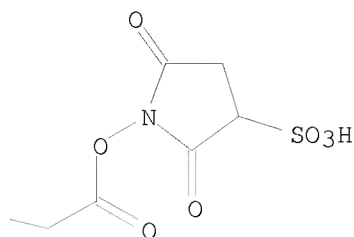
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2004018841 A 20040122 JP 2002-180539 20020620 <--  
 JP 4340423 B2 20091007  
 PRIORITY APPLN. INFO.: JP 2002-180539 20020620  
 AB A photoreactive glycoconjugate and a labeled photoreactive glycoconjugate are provided, which are useful for studying the function and structure of a biopolymer such as a carbohydrate receptor capable of interacting with a carbohydrate. Also provided are a method for trapping a carbohydrate receptor with the photoreactive glycoconjugate, and a method for measuring a carbohydrate receptor with the labeled photoreactive glycoconjugate. The photoreactive glycoconjugate is displayed by the following formula, and the labeled photoreactive glycoconjugate is prepared by binding this photoreactive glycoconjugate with a labeling compound A-X-Y (A: lipid, X: glycoconjugate, Y: photoreactive compound residue, -: covalent bond).  
 IT 179763-59-8, Sulfo-SBED  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 ((labeled) photoreactive glycoconjugate, and methods for trapping and measuring carbohydrate receptor)  
 RN 179763-59-8 CAPLUS  
 CN Propanoic acid, 3-[[2-[[[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-3-sulfo-1-pyrrolidinyl ester, sodium salt (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A





● Na

L8 ANSWER 5 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:640999 CAPLUS

DOCUMENT NUMBER: 138:39483

TITLE: Syntheses of novel photoaffinity probes for bioorganic studies on nyctinasty of leguminous plants

AUTHOR(S): Sugimoto, Takanori; Fujii, Tomohiko; Hatanaka, Yasumaru; Yamamura, Shosuke; Ueda, Minoru

CORPORATE SOURCE: Faculty of Science and Technology, Department of Chemistry, Laboratory of Natural Products, Keio University, Hiyoshi, Yokohama, 223-8522, Japan

SOURCE: Tetrahedron Letters (2002), 43(37), 6529-6532

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 138:39483

AB Two novel and non-radioactive photoaffinity probes for the bioorg. study of nyctinasty are designed and synthesized based on potassium isolespedezate, which induces leaf-opening against the leaf of *Cassia mimosoides* L. These probes bear a trifluoromethyldiazirine or diazophenyl group for photoaffinity and a biotin subunit for affinity chromatog. and chemiluminescent detection. The probes showed leaf-opening activity at  $5 \times 10^{-5}$  mol/L with leaves of *C. mimosoides*; thus, they would be an important tool for the identification of a receptor protein for potassium isolespedezate.

IT 478701-08-5P

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(syntheses of novel photoaffinity probes based on potassium isolespedezate for bioorg. studies on nyctinasty of leguminous plants)

RN 478701-08-5 CAPLUS

CN 2-Propenoic acid, 2-[[6-[[3-[[2-[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-1-oxopropyl]amino]-6-deoxy- $\beta$ -D-galactopyranosyl]oxy]-3-(4-hydroxyphenyl)-, monopotassium salt, (2Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

Double bond geometry as shown.



● K

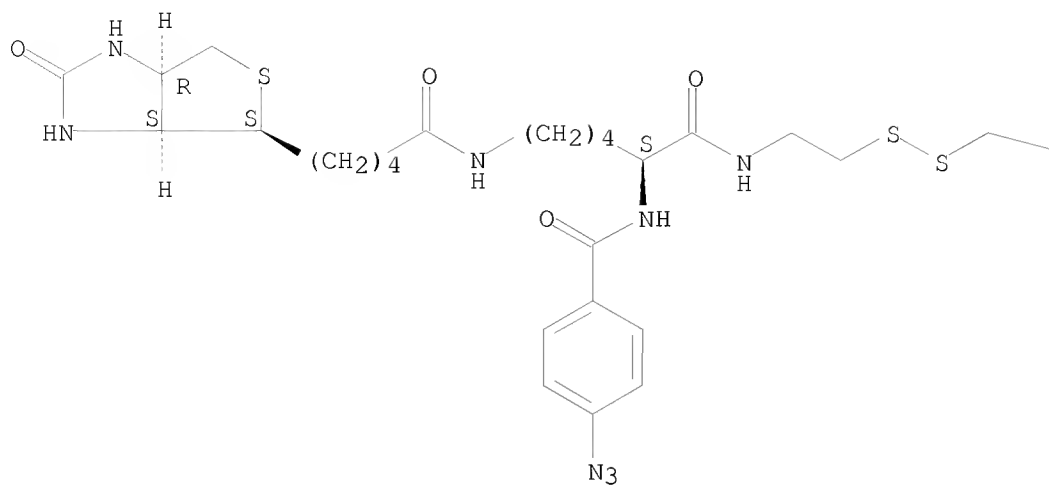
RL: RCT (Reactant); RACT (Reactant or reagent)

RN 179763-59-8 CAPLUS

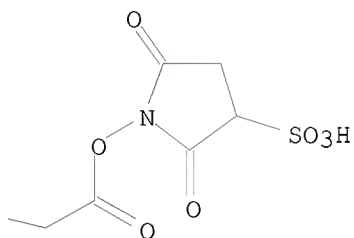
CN Propanoic acid, 3-[[2-[[[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-3-sulfo-1-pyrrolidinyl ester, sodium salt (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



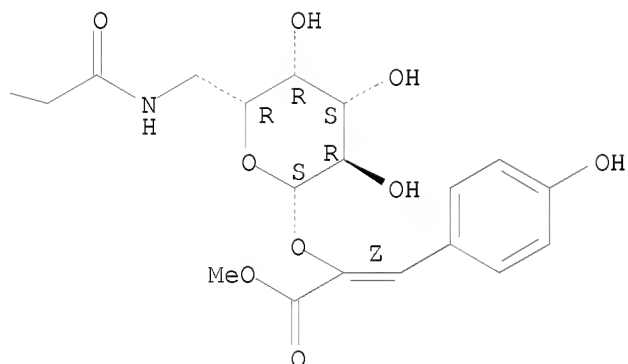
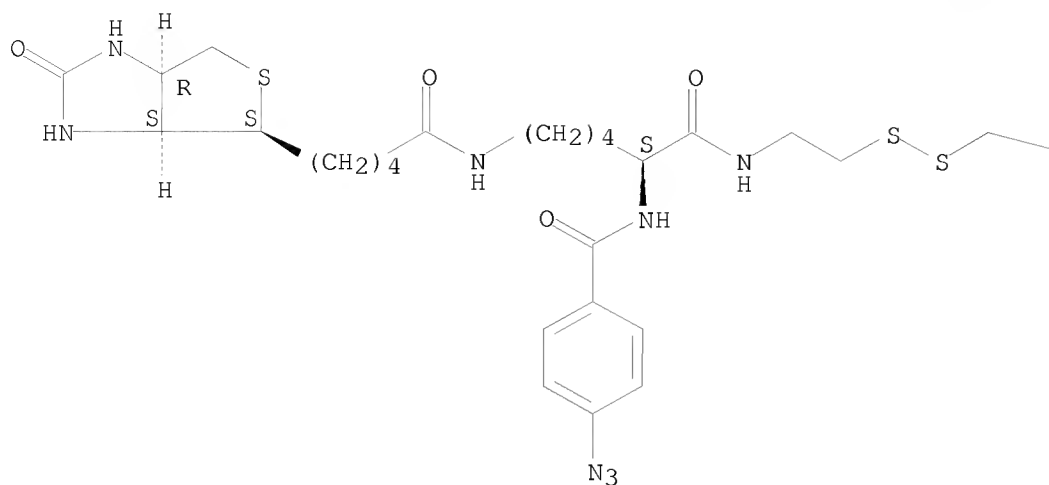
PAGE 1-B



● Na

IT 478701-22-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (syntheses of novel photoaffinity probes based on potassium  
 isolespedezate for bioorg. studies on nyctinasty of leguminous plants)  
 RN 478701-22-3 CAPLUS  
 CN 2-Propenoic acid, 2-[[6-[[3-[[2-[[2S]-2-[(4-azidobenzoyl)amino]-6-[[5-  
 [(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-  
 oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-1-oxopropyl]amino]-6-deoxy-  
 $\beta$ -D-galactopyranosyl]oxy]-3-(4-hydroxyphenyl)-, methyl ester, (2Z)-  
 (CA INDEX NAME)

Absolute stereochemistry.  
 Double bond geometry as shown.



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS  
RECORD (11 CITINGS)  
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:574920 CAPLUS

DOCUMENT NUMBER: 137:140337

TITLE: Preparation of hydroxyhexafluoropropylarenes as  
malonyl-CoA decarboxylase inhibitors.

INVENTOR(S): Arrhenius, Thomas; Chen, Mi; Cheng, Jie Fei; Haramura,  
Masayuki; Huang, Yujin; Nadzan, Alex; Tith, Sovouthy;  
Wallace, David; Zhang, Lin; Brown, Steve; Harmon,  
Charles

PATENT ASSIGNEE(S): Chugai Seiyaku Kabushiki Kaisha, Japan

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

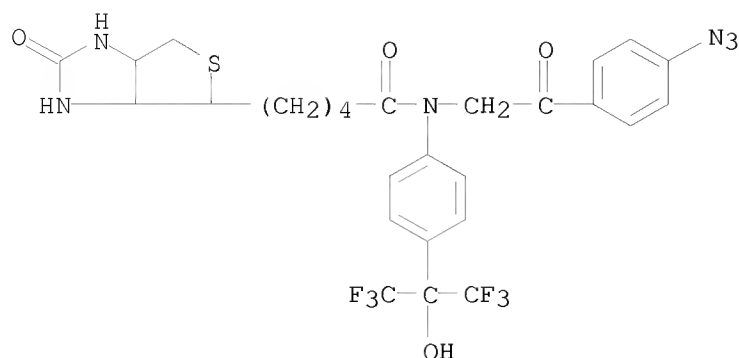
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002058690	A2	20020801	WO 2002-US1814	20020122 <--
WO 2002058690	A3	20030424		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002236830	A1	20020806	AU 2002-236830	20020122 <--
EP 1353662	A2	20031022	EP 2002-703196	20020122 <--
EP 1353662	B1	20070418		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004521113	T	20040715	JP 2002-559024	20020122 <--
JP 4503232	B2	20100714		
AT 359773	T	20070515	AT 2002-703196	20020122
ES 2284817	T3	20071116	ES 2002-703196	20020122
CN 101596191	A	20091209	CN 2009-10139558	20020126
US 20040087627	A1	20040506	US 2003-466856	20030721 <--
US 7385063	B2	20080610		
JP 2008007510	A	20080117	JP 2007-185377	20070717
JP 2008001719	A	20080110	JP 2007-227557	20070903
JP 2008100998	A	20080501	JP 2007-267407	20071015
JP 2010065054	A	20100325	JP 2009-261692	20091117
JP 2010077150	A	20100408	JP 2009-270935	20091130
PRIORITY APPLN. INFO.:				
			US 2001-264552P	P 20010126
			US 2001-265380P	P 20010126
			JP 2002-559024	A3 20020122
			JP 2002-563930	A3 20020122
			WO 2002-US1814	W 20020122
			CN 2002-803537	A3 20020126
			JP 2002-559032	A3 20020126
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT				
OTHER SOURCE(S): CASREACT 137:140337; MARPAT 137:140337				
AB	A method for the inhibition of malonyl-CoA decarboxylase (MCD) comprises administration of W[C(OH)(CF <sub>3</sub> ) <sub>2</sub> ] [W = (substituted) Ph, pyridinyl, pyrazolyl, furyl, thienyl, pyrrolyl]. Thus, 4-(EtNH)C <sub>6</sub> H <sub>4</sub> [C(OH)(CF <sub>3</sub> ) <sub>2</sub> ], poly(4-vinylpyridine), and isobutyryl chloride were stirred 14 h in CH <sub>2</sub> Cl <sub>2</sub> to give 41% 4-[Me <sub>2</sub> CHCO(Et)N]C <sub>6</sub> H <sub>4</sub> [C(OH)(CF <sub>3</sub> ) <sub>2</sub> ]. Tested title compds. inhibited MCD with IC <sub>50</sub> = 0.007-0.557 $\mu$ M.			
IT	444620-98-8 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (preparation of hydroxyhexafluoropropylarenes as malonyl-CoA decarboxylase inhibitors)			
RN	444620-98-8 CAPLUS			
CN	1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[2-(4-azidophenyl)-2-oxoethyl]hexahydro-2-oxo-N-[4-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]phenyl]- (CA INDEX NAME)			



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS  
RECORD (11 CITINGS)  
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2001:105070 CAPLUS

DOCUMENT NUMBER: 134:157723

TITLE: Synthesis and characterization of insulin-like growth factor (IGF)-1 photoprobes selective for the IGF-binding proteins (IGFBPs) photoaffinity labeling of the IGF-binding domain on IGFBP-2

AUTHOR(S): Horney, Mark J.; Evangelista, Caroline A.; Rosenzweig, Steven A.

CORPORATE SOURCE: Department of Cell and Molecular Pharmacology and Experimental Therapeutics, Medical University of South Carolina, Charleston, SC, 29425, USA

SOURCE: Journal of Biological Chemistry (2001), 276(4), 2880-2889

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular Biology

DOCUMENT TYPE: Journal

LANGUAGE: English

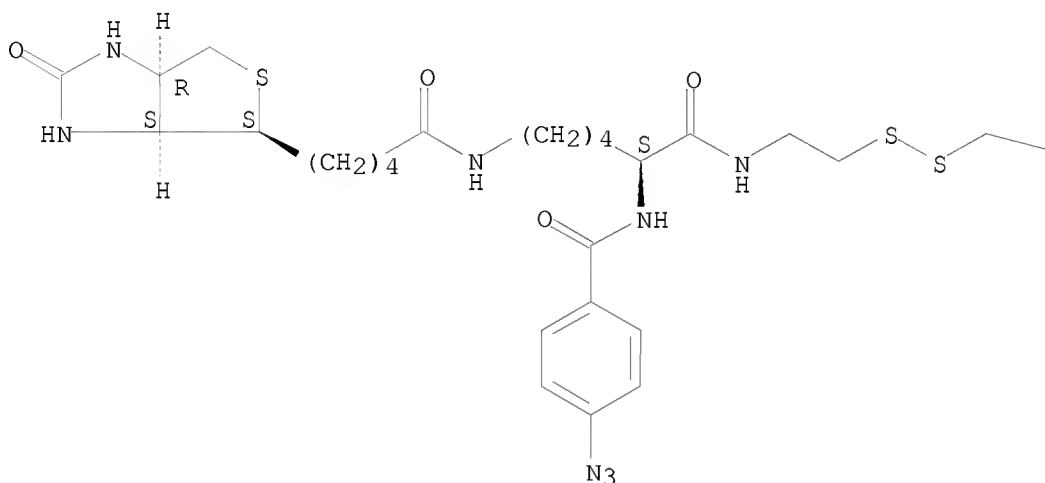
AB Elevated insulin-like growth factor (IGF)-1 levels are prognostic for the development of prostate and breast cancers and exacerbate the complications of diabetes. In each case, perturbation of the balance between IGF-1/2, the IGF-1 receptor, and the IGF-binding proteins (IGF-BPs) leads to elevated IGF-1 sensitivity. Blockade of IGF action in these diseases would be clin. significant. Unfortunately, effective IGF antagonists are currently unavailable. The IGFBPs exhibit high affinity and specificity for the IGFs and serve as natural IGF antagonists, limiting their mitogenic/anti-apoptotic effects. As an initial step in designing IGFBP-based agents that antagonize IGF action, we have begun to analyze the structure of the IGF-binding site on IGFBP-2. To this end, two IGF-1 photoprobes, N $\alpha$ Gly1-(4-azidobenzoyl)-IGF-1 (abG1IGF-1) and N $\alpha$ Gly1-([2-6-(biotinamido)-2(p-azidobenzamido)hexanoamido]ethyl-1,3'-dithiopropionoyl)-IGF-1 (bedG1IGF-1), selective for the IGFBPs were synthesized by derivatization of the  $\alpha$ -amino group of Gly1, known to be part of the IGFBP-binding domain. Mass spectrometric anal. of the reduced, alkylated, and trypsin-digested abG1IGF-1·recombinant human IGFBP-2 (rhIGFBP-2) complex indicated photoincorporation near the carboxyl terminus of rhIGFBP-2, between residues 266 and 287. Mass spectrometric anal. of avidin-purified tryptic peptides of the bedG1IGF-1·rhIGFBP-2 complex revealed photoincorporation within residues 212-227. Taken together, these data indicate that the

IGFBP-binding domain on IGF-1 contacts the distal third of IGFBP-2, providing evidence that the IGF-1-binding domain is located within the C terminus of IGFBP-2.

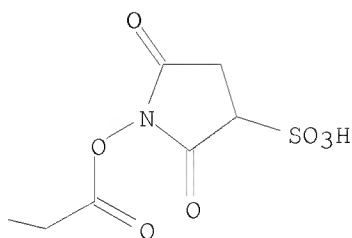
IT 179763-59-8DP, Sulfo-SBED, reaction products with IGF-1  
 RL: BPR (Biological process); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (synthesis and characterization of insulin-like growth factor (IGF)-1 photoprobes selective for IGF-binding proteins (IGFBPs) photoaffinity labeling of IGF-binding domain on IGFBP-2)  
 RN 179763-59-8 CAPLUS  
 CN Propanoic acid, 3-[[2-[[[(2S)-2-[(4-azidobenzoyl)amino]-6-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxohexyl]amino]ethyl]dithio]-, 2,5-dioxo-3-sulfo-1-pyrrolidinyl ester, sodium salt (1:1) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



● Na

OS.CITING REF COUNT: 17 THERE ARE 17 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)  
 REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 33 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:635337 CAPLUS

DOCUMENT NUMBER: 133:247746

TITLE: Oligonucleotide immobilization on micropatterned streptavidin surfaces

AUTHOR(S): Sabanayagam, Chandran R.; Smith, Cassandra L.; Cantor, Charles R.

CORPORATE SOURCE: Center for Advanced Biotechnology, Boston University, Boston, MA, 02215, USA

SOURCE: Nucleic Acids Research (2000), 28(8), e33, ii-iv

CODEN: NARHAD; ISSN: 0305-1048

PUBLISHER: Oxford University Press

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The authors describe a simple procedure for photolithog. patterning of streptavidin on silicon substrates. Long wavelength UV (365 nm) light was used to direct the covalent attachment of photoactivatable biotin onto silylated silicon wafers. Fluorescently labeled streptavidin was found to bind only in areas exposed to the light. The authors used this procedure to selectively pattern streptavidin inside microwells etched in silicon, and the authors investigated the binding characteristics of biotinylated oligonucleotides of lengths, 54 and 99 bases. The binding curves were found to fit the functional form of the Langmuir isotherm, with binding saturation proportional to  $n^{-3/4}$ .

IT 288860-12-8

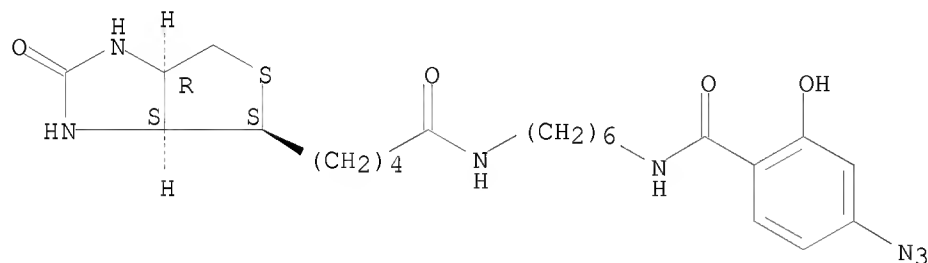
RL: ARU (Analytical role, unclassified); DEV (Device component use); ANST (Analytical study); USES (Uses)

(oligonucleotide immobilization on micropatterned streptavidin surfaces)

RN 288860-12-8 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide,  
N-[6-[(4-azido-2-hydroxybenzoyl)amino]hexyl]hexahydro-2-oxo-,  
(3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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